HAZARDOUS WASTE IN THE STATE OF NEW JERSEY

HEARING

BEFORE THE

SUBCOMMITTEE ON NATURAL RESOURCES,
AGRICULTURE RESEARCH AND ENVIRONMENT

OF THE

COMMITTEE ON
SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

SECOND SESSION

JANUARY 27, 1986

[No. 144]

Printed for the use of the
Committee on Science and Technology

U.S. GOVERNMENT PRINTING OFFICE
61-869 O WASHINGTON : 1986

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

H 701-92

COMMITTEE ON SCIENCE AND TECHNOLOGY

DON FUQUA, Florida, *Chairman*

ROBERT A. ROE, New Jersey
GEORGE E. BROWN, Jr., California
JAMES H. SCHEUER, New York
MARILYN LLOYD, Tennessee
TIMOTHY E. WIRTH, Colorado
DOUG WALGREN, Pennsylvania
DAN GLICKMAN, Kansas
ROBERT A. YOUNG, Missouri
HAROLD L. VOLKMER, Missouri
BILL NELSON, Florida
STAN LUNDINE, New York
RALPH M. HALL, Texas
DAVE McCURDY, Oklahoma
NORMAN Y. MINETA, California
MICHAEL A. ANDREWS, Texas
BUDDY MacKAY,** Florida
TIM VALENTINE, North Carolina
HARRY M. REID, Nevada
ROBERT G. TORRICELLI, New Jersey
RICK BOUCHER, Virginia
TERRY BRUCE, Illinois
RICHARD H. STALLINGS, Idaho
BART GORDON, Tennessee
JAMES A. TRAFICANT, Jr., Ohio

MANUEL LUJAN, Jr.,* New Mexico
ROBERT S. WALKER, Pennsylvania
F. JAMES SENSENBRENNER, Jr., Wisconsin
CLAUDINE SCHNEIDER, Rhode Island
SHERWOOD L. BOEHLERT, New York
TOM LEWIS, Florida
DON RITTER, Pennsylvania
SID W. MORRISON, Washington
RON PACKARD, California
JAN MEYERS, Kansas
ROBERT C. SMITH, New Hampshire
PAUL B. HENRY, Michigan
HARRIS W. FAWELL, Illinois
WILLIAM W. COBEY, Jr., North Carolina
JOE BARTON, Texas
D. FRENCH SLAUGHTER, Jr., Virginia
DAVID S. MONSON, Utah

Harold P. Hanson, *Executive Director*
Robert C. Ketcham, *General Counsel*
Regina A. Davis, *Chief Clerk*
Joyce Gross Freiwald, *Republican Staff Director*

Subcommittee on Natural Resources, Agriculture Research and Environment

JAMES H. SCHEUER, New York, *Chairman*

TIMOTHY E. WIRTH, Colorado
TIM VALENTINE, North Carolina
DAVE McCURDY, Oklahoma
HARRY M. REID, Nevada
ROBERT G. TORRICELLI, New Jersey
MICHAEL A. ANDREWS, Texas

CLAUDINE SCHNEIDER, Rhode Island
DON RITTER, Pennsylvania
JAN MEYERS, Kansas
ROBERT C. SMITH, New Hampshire
PAUL B. HENRY, Michigan

---

*Ranking Republican Member.
**Serving on Committee on the Budget for 99th Congress.

CONTENTS

WITNESSES

Janaury 27, 1986: Page
- Hon. Frank R. Lautenberg, a U.S. Senator from the State of New Jersey .. 1
- Hon. James J. Florio, a Representative in Congress from the State of New Jersey 13
- Christopher Daggett, Region II Administrator, U.S. Environmental Protection Agency, accompanied by William Librizzi; John E. Baublitz, Acting Deputy Director, Office of Remedial Action and Waste Technology, Nuclear Energy, U.S. Department of Energy; and George Tyler, assistant commissioner, Environmental Management and Control, New Jersey Department of Environmental Protection 28
- James Panos, mayor, Borough of Maywood; Herbert Gorag, mayor, Borough of Wood-Ridge; Henry J. Hill, mayor, Kearny; Bernard Hersh, mayor, Borough of Fair Lawn; Richard Potter, Councilman, Borough of East Rutherford; Doris Mahalick, Board of Freeholders 226

Appendix: Additional material submitted for the record 261

HAZARDOUS WASTE IN THE STATE OF NEW JERSEY

MONDAY, JANUARY 27, 1986

House of Representatives, Committee on Science and Technology, Subcommittee on Natural Resources, Agriculture Research and Environment,
Washington, DC.

The subcommittee met, pursuant to call, at 10 a.m., at Bergen County Board of Freeholders Chambers, Court Street, Hackensack, NJ, Hon. James H. Scheuer (chairman of the subcommittee) presiding.

Mr. Scheuer. The Subcommittee on Natural Resources, Agriculture Research and Environment will now come to order. When Congress passed the first Superfund law in 1980, we had high hopes that by this time, in 1986, we would have made substantial in-roads on dealing with the Nation's perhaps 10,000 or more hazardous sites and that the worst of them would be only dreary memories. But in the last 5 years, disappointingly enough to all of us, the EPA has only cleaned up six of the 10,000 toxic sites we had our eye on at that time, six of the 10,000 sites estimated by the Office of Technology Assessment to be our first priority target of opportunity.

And the poor quality of even the six that we cleaned up was evidenced last summer when Hurricane Gloria caused one of the six allegedly clean sites to begin spilling thousands and thousands of gallons of toxic waste into the Susquehanna River.

Well, we are here this morning to discuss what went wrong, why have our hopes and expectations been dashed, and what the Congress can do about it and what you can do about it. I am going to save the rest of my statement for later because we have as our very distinguished witness, the distinguished Senator from New Jersey, Senator Frank Lautenberg, who will lead off our witness list and give us his experience. Senator Lautenberg, it is a great pleasure to have you with us.

STATEMENT OF HON. FRANK R. LAUTENBERG, A U.S. SENATOR FROM THE STATE OF NEW JERSEY

Senator Lautenberg. Thank you, Mr. Chairman, and we welcome you to New Jersey. We have arranged a partially sunny day for you. Even though the subject is a bit grim, we think New Jersey is a wonderful place to be and we hope you will visit us here frequently, perhaps on occasion with a better subject.

I appreciate the opportunity to be here with you and my colleague, Congressman Torricelli. The committee's presence here today reflects deep concern, which I share with you, and our colleague, Congressman Florio, about the lack of progress in cleaning up Superfund sites in New Jersey. Reshaping the Superfund Program and making it more effective have been top priorities of mine in this State.

We are at a critical juncture in the Superfund Program. As we start the year, the news is terrible. Despite legislation to renew and strengthen the Superfund Program approved by both the House and the Senate, we face a contentious conference on the bill. But, more ominous, perhaps, is the prospect of massive budget cuts for Superfund and EPA under Gramm-Rudman.

Gramm-Rudman fever has gripped Washington, and it threatens to suffocate efforts to infuse life into the Superfund Program.

Since last August, the program has been virtually at a standstill, and I am sure everyone noticed a news release yesterday that appeared in the New York Times about the fact we might be seeing furloughs among staff people in the very near future, and even the limited momentum we have achieved over the last couple of years has been jeopardized.

But, Mr. Chairman, Gramm-Rudman, portends even more bad news for New Jersey's efforts to clean up its environment. Once the taxing authority under Superfund is renewed, the program will be self-financing. However, it will still be subject to the budget and appropriations process in Congress. Thus, the fate of the program rests not only on the outcome of our reauthorization efforts, but, just as importantly, it rests on the fiscal year 1987 budget.

I sit on the Environment Committee and the Appropriations and Budget Committees. Last year we got our first taste of what misplaced budget priorities can do to our environmental programs.

The Senate Environment and Public Works Committee spent a good chunk of 1984 and 1985 crafting a Superfund bill that was responsive to the challenge posed by a legacy of indiscriminate toxic waste dumping. We twice reported a bill to the Senate that expanded the program five-fold, from its original $1.6 billion funding to a level of $7.5 billion.

In 1985, in an effort to get our burgeoning budget deficits under control, the Senate Budget Committee went over every domestic program in the Federal Government with a fine tooth comb. We had 60 rollcall votes in committee before we approved a budget. At the end of that process, with very tight constraints, the Congress approved a budget that accommodated the Environment Committee's recommendation for Superfund. For fiscal year 1986, our budget resolution made room for expenditures of $1.2 billion.

Why did we do this? Because the record was clear. Because it was the level of funding minimally necessary to make a dent in our toxic waste problem.

Next, the Appropriations Committee came in. We started off seeking the funding allowed in the budget resolution, $1.2 billion. And that wasn't in the cards. And, on the Senate floor, in response to a veto threat, Superfund was subjected to across-the-board cuts, further reducing funding levels. Ultimately, to get spending levels down and provide funding for other EPA programs, the enacted appropriation bill cut back Superfund from $1.2 billion to $900 million.

What has this meant to our State? It means a lot. New Jersey has received approximately 20 percent of Federal Superfund moneys. So our State absorbed 20 percent of these cuts. And, to the citizens of this county, Bergen County, and surrounding areas, it means years more before the Superfund sites in this part of our State are cleaned up.

Now we have Gramm-Rudman. Under Gramm-Rudman, Congress must cut the fiscal year 1987 budget by more than $50 billion, as we see it tentatively, in a manner acceptable to the President, or automatic, across-the-board cuts are going to be triggered. From all accounts, the President's budget will request a 3-percent increase in military spending. It will provide for no new revenues. That means the President's budget will recommend that the savings come almost exclusively from domestic programs.

Budget leaks suggest that the administration is poised to savage the Environmental Protection Agency. Cuts of up to 20 or 25 percent are rumored for EPA. Given the structure of the agency's budget, there are very few ways to achieve this goal. Superfund could be cut deeply. Massive personnel cuts could be prescribed. Or municipal grants for sewage treatment plants—the only other large spending program at EPA—could be scaled back or terminated.

If the President cuts Superfund by 20 to 25 percent from fiscal year 1986 levels, fiscal year 1987 spending would drop to roughly $700 million. That would leave about half the funding that was recommended by the Senate for the Superfund Program and about a third of what the House of Representatives considered. It is even less than the administration's original recommendation of roughly a billion per year for the program.

And this is only the start. Rather than building a program over time, we would whittle it down. Because fiscal year 1987 is only the first of the 5 years under Gramm-Rudman. So we can look toward a steadily decreasing environmental budget over the next 5 years if domestic programs are to bear the full brunt of budgetary savings.

Were the President to spare Superfund, cuts of this size at EPA could be achieved in only one of two ways. Draconian cuts could be imposed on EPA's operating budget, resulting in massive layoffs of the people who enforce our environmental laws. Or the sewage construction grant program could be ended. That would throw thousands of communities into violation of the Clean Water Act, making further construction and economic growth impossible. In New Jersey alone, some 114 communities are already living with sewer hookup bans due to water quality problems.

In New Jersey, the quality of the environment is at the top of the list of public concerns. Today your focus will be on several of the 99 sites of the Superfund priority list that exist in our State. So far, the residents living near these sites see no progress. Under Gramm-Rudman, the chance that they will be dealt with in the near term is vastly diminished.

Mr. Chairman, this wrong-headed budgetary strategy will affect more than just the number of sites the Superfund Program can touch. It will also undercut some of the most positive initiatives undertaken in the Congress to strengthen the Superfund Program.

Let's look at some of the improvements included in the Superfund legislation pending in Congress.

Strong support exists for mandatory schedules for site studies and cleanups to ensure that EPA accelerates the pace of the program. Adequate cleanup standards should be included to assure that sites are properly contained and wastes are effectively removed. Greater EPA oversight of the cleanup of toxic wastes on military bases is necessary, as we have painfully learned in our State. But these requirements are all going to require funding.

Under both the House and Senate bills, EPA will be charged with establishing the first Federal community right-to-know laws, which I sponsored in the Senate. Information about the location and characteristics of specific toxic chemicals will be made available to the public and emergency response personnel to help prevent and respond to emergency releases. For the first time, information on regular emissions of toxic substances will be collected. These provisions cannot be carried out without cost.

These are the challenges that face us over the coming months. The deficits that have ballooned beyond imagination over the past 5 years must be brought under control, and few people disagree with that premise.

But this goal should not be accomplished at the expense of the public health and environment.

I look forward to working with you, Mr. Chairman, and my colleagues from New Jersey to bring balance and reason to our budget process this year. I appreciate this opportunity to be with you and to answer any questions that you might have.

[The prepared statement of Senator Lautenberg follows:]

STATEMENT BY SENATOR FRANK R. LAUTENBERG JANUARY 27, 1986
HOUSE COMMITTEE ON SCIENCE AND TECHNOLOGY
HACKENSACK, NEW JERSEY

GOOD MORNING MR. CHAIRMAN, CONGRESSMAN TORRICELLI. I APPRECIATE THE OPPORTUNITY TO BE WITH YOU. THE COMMITTEE'S PRESENCE HERE TODAY REFLECTS DEEP CONCERN, WHICH I SHARE WITH YOU, AND OUR COLLEAGUE, CONGRESSMAN FLORIO, ABOUT THE LACK OF PROGRESS IN CLEANING UP SUPERFUND SITES IN NEW JERSEY. RESHAPING THE SUPERFUND PROGRAM, AND MAKING IT MORE EFFECTIVE, HAVE BEEN TOP PRIORITIES OF MINE IN THE SENATE.

WE ARE AT A CRITICAL JUNCTURE IN THE SUPERFUND PROGRAM. AS WE START THE YEAR, THE NEWS IS NOT GOOD. DESPITE LEGISLATION TO RENEW AND STRENGTHEN THE SUPERFUND PROGRAM APPROVED BY BOTH THE HOUSE AND THE SENATE, WE FACE A CONTENTIOUS CONFERENCE ON THE BILL. BUT, MORE OMINOUS, PERHAPS, IS THE PROSPECT OF MASSIVE BUDGET CUTS FOR SUPERFUND UNDER GRAMM-RUDMAN.

GRAMM-RUDMAN FEVER HAS GRIPPED WASHINGTON. AND, IT THREATENS TO SUFFOCATE EFFORTS TO INFUSE LIFE INTO THE SUPERFUND PROGRAM.

SINCE LAST AUGUST, THE PROGRAM HAS BEEN VIRTUALLY AT A STANDSTILL. EVEN THE LIMITED MOMENTUM ATTAINED OVER THE PAST COUPLE OF YEARS HAS BEEN JEOPARDIZED.

BUT, MR. CHAIRMAN, GRAMM-RUDMAN PORTENDS EVEN MORE BAD NEWS FOR NEW JERSEY'S EFFORTS TO CLEAN UP ITS ENVIRONMENT.

ONCE THE TAXING AUTHORITY UNDER SUPERFUND IS RENEWED, THE PROGRAM WILL BE SELF-FINANCING. HOWEVER, IT WILL STILL BE SUBJECT TO THE BUDGET AND APPROPRIATIONS PROCESS IN CONGRESS. THUS, THE FATE OF THE PROGRAM RESTS NOT ONLY ON THE OUTCOME OF OUR REAUTHORIZATION EFFORTS. BUT, JUST AS IMPORTANTLY, IT RESTS ON THE FY87 BUDGET.

I SIT ON THE SENATE ENVIRONMENT, APPROPRIATIONS AND BUDGET COMMITTEES. LAST YEAR, WE GOT OUR FIRST TASTE OF WHAT MISPLACED BUDGET PRIORITIES CAN DO TO OUR ENVIRONMENTAL PROGRAMS.

THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE SPENT A GOOD CHUNK OF 1984 AND 1985 CRAFTING A SUPERFUND BILL THAT WAS RESPONSIVE TO THE CHALLENGES POSED BY A LEGACY OF INDISCRIMINATE TOXIC WASTE DUMPING. WE TWICE REPORTED A BILL TO THE SENATE THAT EXPANDED THE PROGRAM FIVEFOLD, FROM ITS ORIGINAL $1.6 BILLION FUNDING LEVEL TO $7.5 BILLION.

IN 1985, IN AN EFFORT TO GET OUR BURGEONING BUDGET DEFICITS UNDER CONTROL, THE SENATE BUDGET COMMITTEE WENT OVER EVERY DOMESTIC PROGRAM IN THE FEDERAL GOVERNMENT WITH A FINE TOOTH COMB. WE HAD 60 ROLL CALL VOTES IN COMMITTEE BEFORE WE APPROVED A BUDGET. AT THE END OF THAT PROCESS, WITHIN VERY TIGHT CONSTRAINTS, THE CONGRESS APPROVED A BUDGET THAT ACCOMMODATED THE ENVIRONMENT COMMITTEE'S RECOMMENDATION FOR SUPERFUND. FOR FY86, OUR BUDGET RESOLUTION MADE ROOM FOR EXPENDITURES OF $1.2 BILLION.

WHY DID WE DO THIS? BECAUSE THE RECORD WAS CLEAR. BECAUSE IT WAS THE LEVEL OF FUNDING NECESSARY TO MAKE A DENT IN OUR TOXIC WASTE PROBLEM.

NEXT, THE APPROPRIATIONS COMMITTEE STEPPED IN. WE STARTED OFF SEEKING THE FUNDING ALLOWED IN THE BUDGET RESOLUTION, $1.2 BILLION. BUT THAT WASN'T IN THE CARDS. AND, ON THE SENATE FLOOR, IN RESPONSE TO A VETO THREAT, SUPERFUND WAS SUBJECTED TO ACROSS THE BOARD CUTS, FURTHER REDUCING FUNDING LEVELS. ULTIMATELY, TO GET SPENDING LEVELS DOWN AND PROVIDE FUNDING FOR OTHER EPA PROGRAMS, THE ENACTED APPROPRIATION BILL CUT BACK SUPERFUND TO $900 MILLION.

WHAT DID THIS MEAN TO NEW JERSEY? IT MEANT A LOT. NEW JERSEY HAS RECEIVED APPROXIMATELY 20 PERCENT OF FEDERAL SUPERFUND MONIES. SO, OUR STATE ABSORBED 20 PERCENT OF THOSE CUTS. AND, TO THE CITIZENS OF BERGEN COUNTY AND SURROUNDING AREAS, IT MEANS YEARS MORE BEFORE THE SUPERFUND SITES IN THIS PART OF OUR STATE ARE CLEANED UP.

NOW WE HAVE GRAMM-RUDMAN. UNDER GRAMM-RUDMAN, CONGRESS MUST CUT THE FY87 BUDGET BY MORE THAN $50 BILLION, IN A MANNER ACCEPTABLE TO THE PRESIDENT, OR AUTOMATIC, ACROSS THE BOARD CUTS WILL BE TRIGGERED. FROM ALL ACCOUNTS, THE PRESIDENT'S BUDGET WILL REQUEST A 3 PERCENT INCREASE IN MILITARY SPENDING. IT WILL PROVIDE FOR NO NEW REVENUES. THAT MEANS THE PRESIDENT'S BUDGET WILL RECOMMEND THAT THESE SAVINGS COME ALMOST EXCLUSIVELY FROM DOMESTIC PROGRAMS.

BUDGET LEAKS SUGGEST THAT THE ADMINISTRATION IS POISED TO SAVAGE THE ENVIRONMENTAL PROTECTION AGENCY. CUTS OF UP TO 20 OR 25 PERCENT ARE RUMORED FOR EPA. GIVEN THE STRUCTURE OF THE AGENCY'S BUDGET, THERE ARE VERY FEW WAYS TO ACHIEVE THIS GOAL. SUPERFUND COULD BE CUT DEEPLY. MASSIVE PERSONNEL CUTS COULD BE PRESCRIBED. OR MUNICIPAL GRANTS FOR SEWAGE TREATMENT PLANTS -- THE ONLY OTHER LARGE SPENDING PROGRAM AT EPA -- COULD BE SCALED BACK OR TERMINATED.

IF THE PRESIDENT CUTS SUPERFUND BY 20 TO 25 PERCENT FROM FY 86 LEVELS, FY87 SPENDING WOULD DROP TO ROUGHLY $700 MILLION. THAT WOULD LEAVE ABOUT HALF THE FUNDING RECOMMENDED BY THE SENATE FOR THE SUPERFUND PROGRAM, AND ABOUT ONE-THIRD OF WHAT THE HOUSE OF REPRESENTATIVES RECOMMENDED. IT IS EVEN LESS THAN THE ADMINISTRATION'S ORIGINAL RECOMMENDATION OF ROUGHLY $1 BILLION PER YEAR FOR THE PROGRAM.

AND, THIS IS ONLY THE START. RATHER THAN BUILDING A PROGRAM OVER TIME, WE WOULD WHITTLE IT DOWN. BECAUSE FY87 IS ONLY THE FIRST OF FIVE YEARS UNDER GRAMM-RUDMAN. SO, WE CAN LOOK TOWARD A STEADILY DECREASING ENVIRONMENTAL BUDGET OVER THE NEXT FIVE YEARS, IF DOMESTIC PROGRAMS ARE TO BEAR THE FULL BRUNT OF BUDGETARY SAVINGS.

WERE THE PRESIDENT TO SPARE SUPERFUND, CUTS OF THIS SIZE AT EPA COULD BE ACHIEVED IN ONLY ONE OF TWO WAYS. DRACONIAN CUTS COULD BE IMPOSED ON EPA'S OPERATING BUDGET, RESULTING IN MASSIVE LAY-OFFS OF THE PEOPLE WHO ENFORCE OUR ENVIRONMENTAL LAWS. OR, THE SEWAGE CONSTRUCTION GRANT PROGRAM COULD BE ENDED. THAT WOULD THROW THOUSANDS OF COMMUNITIES INTO VIOLATION OF THE CLEAN WATER ACT, MAKING FURTHER CONSTRUCTION AND ECONOMIC GROWTH IMPOSSIBLE. IN NEW JERSEY, SOME 114 COMMUNITIES ARE ALREADY LIVING WITH SEWER HOOKUP BANS DUE TO WATER QUALITY PROBLEMS.

IN NEW JERSEY, THE QUALITY OF THE ENVIRONMENT IS AT THE TOP OF THE LIST OF PUBLIC CONCERNS. TODAY, YOU WILL BE FOCUSING ON SEVERAL OF THE 99 SITES ON THE SUPERFUND PRIORITY LIST. SO FAR, THE RESIDENTS LIVING NEAR THESE SITES SEE NO PROGRESS. UNDER GRAMM-RUDMAN, THE CHANCE THAT THEY WILL BE DEALT WITH IN THE NEAR TERM IS VASTLY DIMINISHED.

MR. CHAIRMAN, THIS WRONG-HEADED BUDGETARY STRATEGY WILL AFFECT MORE THAN JUST THE NUMBER OF SITES THE SUPERFUND PROGRAM CAN TOUCH. IT WILL ALSO UNDERCUT SOME OF THE MOST POSITIVE INITIATIVES UNDERTAKEN IN THE CONGRESS TO STRENGTHEN THE SUPERFUND PROGRAM.

LET'S LOOK AT SOME OF THE IMPROVEMENTS INCLUDED IN THE SUPERFUND LEGISLATION PENDING IN CONGRESS.

Strong support exists for mandatory schedules for site studies and cleanups to ensure that EPA accelerates the pace of the program. Adequate cleanup standards should be included to assure that sites are properly contained and wastes are effectively removed. Greater EPA oversight of the cleanup of toxic wastes on military bases is necessary, as we have painfully learned in New Jersey. But these requirements are going to require funding.

Under both the House and Senate bills, EPA will be charged with establishing the first federal community "right-to-know" laws, which I sponsored in the Senate. Information about the location and characteristics of specific toxic chemicals will be made available to the public and emergency response personnel to help prevent and respond to emergency releases. For the first time, information on regular emissions of toxic substances will be collected. These provisions will not be without cost.

These are the challenges that face us over the coming months. The deficits that have ballooned beyond imagination over the past five years must be brought under control. Few people disagree with that premise.

But, this goal should not be accomplished at the expense of the public health and environment.

I LOOK FORWARD TO WORKING WITH YOU, MR. CHAIRMAN, AND MY COLLEAGUES FROM NEW JERSEY TO BRING BALANCE AND REASON TO OUR BUDGET PROCESS THIS YEAR.

THANK YOU. I WOULD BE PLEASED TO ANSWER ANY QUESTIONS YOU MIGHT HAVE.

Mr. SCHEUER. Thank you very much. Congressman Torricelli.

Mr. TORRICELLI. Thank you, Mr. Chairman.

Senator, I would like first to thank you for your help in one of the most difficult of these problems we are facing in our area, which is the radon material being stored in Kearny in transit from Essex County. Under Senator Bradley's leadership, we met with the Secretary of Energy, gave him a proposal for moving that material both to the west and to Pennsylvania. Incredibly, I have yet to receive any official response. Senator Bradley has told me the same.

Have you had any answer to our inquiries?

Senator LAUTENBERG. We have heard nothing since that meeting, Congressman, and it is disappointing. At least I think we would have heard a response that perhaps was negative that we could have at least discussed with the Secretary. We have heard nothing.

Mr. TORRICELLI. Senator, one of the questions I am looking forward to asking Mr. Florio who is—is one of the original authors of the Superfund legislation—its prospects and how it would impact us in the administration of this program, extra spending of this program, if we continue in the stalemate between the two Houses. This is a rare opportunity for a House member to be able to ask a Senator what is going on in the other chamber. I would appreciate your assessment of how long it is likely to be before there is some agreement between the two bodies.

Senator LAUTENBERG. Perhaps that ball, as we say in my part of the Senate, ought to be put in the other court, but we are prepared to go by virtue of the first level funding and, very importantly, the schedule and the definition of what constitutes cleanup. I think it is fair to say that there is the impetus to get going on this. I think it's very frankly become a very serious political issue for lots of people who are running in the Senate in 1986, and suddenly I think everybody likes the environmental action that has been taken in the past. I believe we are ready to move with this thing.

Now, overhanging all of this is the Gramm-Rudman, and no one is quite sure what the effects are going to be. Even if we finish with our Superfund conference, and it goes back to both Houses, are we then protected with dedicated funds coming from special tax sources, from sequestration? I don't think that question has been finally resolved, and it appears to most, I think, to be that we will be subject to sequestration; and even if we have the funding, the highway trust fund is a similar example, I think what happens is they simply defer the expenditure of these things.

So, in short, in summary, Congressman, I think that we are ready to go from our standpoint, and I would hope that with the House amendments that we get a really good clean Superfund bill, but the when depends on how we resolve our differences with Gramm-Rudman.

Mr. TORRICELLI. Senator, I would like to thank you for being part of opening this hearing today and, again, to thank you for your help with our problem in Kearny and your continued assistance in seeking a Federal solution to the problems in Maywood as well.

Of course, we also draw on the Secretary of Energy. So your help is very much appreciated.

Mr. SCHEUER. Thank you very much.

The House of Representatives just passed a strong $10 billion, 5-year reauthorization of Superfund. It contains deadlines, it contains standards, and it is designed to get the EPA finally, after these long years, moving on this critical environment problem.

The fact that the House did pass a strong reauthorization of Superfund over the strenuous lobbying efforts of the major polluters with special interests is due to the unflagging, unswerving, dynamic leadership of Congressman James Florio of New Jersey, who is the driving force behind the passage of the authorization of Superfund. And I am delighted he can join us today. Congressman Jim Florio.

STATEMENT OF HON. JAMES J. FLORIO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. Florio. Thank you very much, Mr. Chairman, Congressman Torricelli, ladies and gentlemen.

I am pleased to be able to be here to share some thoughts with you on the specifics that you are talking about today, particularly in terms of permanent treatment. I would likewise be able to identify with the major thrusts of Senator Lautenberg's comments about the need for adequate funding for this program. I will focus my remarks on how it is we should be operating when we get whatever level of funding we get so as to provide for permanent treatment of the sites that we are going to be able to clean up and clean them up in a way that we can be sure they truly are clean.

I can identify with Congressman Torricelli's concerns that he has expressed to me on a number of occasions about the operation of Superfund in his congressional district, and all of us, as Congressmen, have problems that are provincial in the best sense of the word. We are trying to have national policies implemented to deal with a national problem, but certainly those national problems become very much more vivid and meaningful when they manifest themselves in your own district.

I can relate to the Congressman's concerns. I have a substantial number of toxic waste dump sites in my district, and I work very hard to deal with the problem at both levels, the national level, as well as the district-wide level.

If it's any consolation to anyone in the room the problems you have, the frustration that you have in attempting to deal with getting these sites cleaned up in the Bergen County area, really mirror the problem across the country. By this time, I think most people know that the the record of Superfund in actually achieving tangible end results in the last 5 years has not been everything that we would like it to be. As a matter of fact, Chairman Scheuer made the representation that in the first 5 years that only six sites have been cleaned up. There is now starting even to get to be a question as to whether those sites were ever Superfund sites, and then, of course, whether they were in fact cleaned up, as has been highlighted by him. So that record has not been particularly good.

I have some suggestions as to why the record has not been good, and I have some suggestions as to how it is we can change the system so as to make sure that five years from now we are not sitting here lamenting the same type of occurrences. Some of those suggestions we have incorporated into the legislation as passed through the House. We, of course, Mr. Chairman, are very proud of the contribution of all of our New Jersey representatives, particularly those who have taken a lead. Congressman Torricelli, from your subcommittee, has played a very important role, along with Congressman Roe, Congressman Howard, and then in the Senate, both of our Senators are very strategically placed on the Finance Committee and on the Environment and Public Works Committee.

So we in New Jersey have played a significant role, we think. In large measure, that's because not only are we environmentally sensitive, but, quite frankly, it's because New Jersey has more of a problem than most other people do around the country.

I would like to use one of your sites, the Berry site, as an example of where I believe EPA has misread this clear intent of the statute in a way that has caused us not to get anything done in a more rapid way than currently is the case.

Berry Creek site, as you know, here in Bergen County, has been known as a public health hazard for almost 10 years. The State started activities, filed a suit and, in fact, there has been litigation on this matter for the last almost 10 years. It was not until 1984 that the State attempted to obtain Superfund money to finance even preliminary studies on the site.

At the same time, we had that money started to be made available, we had some of the local polluters, the people who are the responsible parties, starting in 1984, to be a little more forthcoming in terms of being willing to undertake some of the preliminary feasibility studies. I suspect that is in large measure, Congressman, because of your efforts to convey to someone around here that really EPA should be serious about carrying out the intent of the law.

We have a situation now where the companies have finally agreed to finance the studies. The studies will not be completed, and these are the preliminary studies, until January 1988, and it will take another 2½ years, if everything goes well, to begin to initiate and start to complete actual cleanup.

Now, I don't know if you feel comfortable, but I certainly don't think you do, and I don't feel comfortable, about talking to our constituents in those timeframes, saying that it is going to be 14, 15, 20 years before things are actually cleaned up at some of these sites.

I suggested that there was a misreading of the statutory intent and nowhere is that better highlighted than in examples like this. Superfund was created so as to provide for the immediate authority and the immediate funding to go to these sites, identify them as such, make an immediate overture to the responsible parties to see if they were willing to come forward to clean up; and if they were not, then for the Superfund and the agencies to initiate the cleanup.

After the cleanup was completed and the public moneys were expended, then the strong legal tools that we gave to EPA involving litigation were to be utilized to recapture the money, to replenish the fund. What we have seen is the system turned upside down, where cleanup doesn't get started right away.

Rather, we have protracted negotiations, and we have litigation started and some sense that litigation has to be completed before we start with the cleanup work. You didn't need Superfund to do that. The environmental agencies always could have had negotiations without Superfund, always had resorts to the courts to obtain judgments to try to force somebody to clean up.

The uniqueness of Superfund that has not fully been appreciated by some in position of authority was that you had the money and the capability of starting the cleanup work and then finding the responsible parties and bringing them to the bar of justice to replenish the money. So therein we have really had a serious problem in understanding what the Congress meant in the hand—or in the minds of some of the regulators.

I think this story of the Berry's Creek instance is what we have as to predominent mode of dealing with Superfund problems over the last number of years. Hence, we have no cleanup. Hence, we have litigation. Hence, we have protracted negotiations, but we don't have any cleanup.

As I think both of you know, and I think most people know, that we have tried to frame the reauthorization of Superfund in such a way so as to be able to correct the deficiencies of the first 5 years. In some respects, that means reducing discretion on the part of the agency when discretion has been used in a way that has not achieved any great results, putting the agency on a strict time table, requiring the agency to adhere to some objective, verifiable standards, so as to be able to be sure that when someone signs off on a site as being clean, it really is clean.

I think we have also attempted, and Senator Lautenberg made reference to a problem that is of great meaning here in New Jersey, incorporating requirements onto the military and Federal Government that will ensure that they have to adhere to the same laws that everyone else has to adhere to in terms of trying to clean up these sites.

One of the provisions of the Superfund reauthorization bill that I would like to emphasize in the balance of my time is the one that both of you, particularly you, Mr. Torricelli, have been intimately involved with, and it is this whole question of attempting to achieve permanent cleanup and trying to achieve permanent cleanup in a way that is going to be much better than the types of cleanup activities EPA has been involved with in the past, more high technology cleanups, cleanups that do not rely upon the traditional approaches to cleaning up toxic waste dumps which effectively entail not too much more than digging holes in the ground and dumping wastes into those holes.

You, of course, Congressman, took a lead role in providing for provisions to be incorporated into the bill as passed through the Congress, attempting to increase research and development capability regarding waste disposal systems, waste minimization systems and permanent treatment of toxic wastes. EPA has not been as helpful as it could be in these areas, not only because they have had some budgetary constraints that have been forced upon them as a result of OMB's intrusion into the budgetary process in not affirmatively providing more research money. Research money at EPA across the board in the last couple of years has experienced drastic and dramatic reductions in ways that this Nation will pay for years and years to come.

But over and above that, EPA has not been helpful, in my opinion, in terms of reducing and removing the opportunities for cheap, inappropriate disposal. Because if in fact they had done that, we would be changing the economics, and we would be forcing new technology to be coming into the fore. EPA has relied principally on containing Superfund wastes on site, or, what is even worse, removing those wastes to other equally unsafe, basically landfill disposal mechanisms.

I think everyone by this time is familiar with some of the studies that my committee and other committees have obtained. One in particular that was particularly disconcerting was a GAO study that indicated that 78 percent of the landfills around the country, the hazardous waste landfills, most of which were being used for transferring Superfund wastes to other sites, were themselves not in compliance with even the minimal requirements of the Resource Conservation Recovery Act, which spells out what it is we should be doing to upgrade, if at all possible, those sites. That is to say that EPA has, and they will concede the fact, moved wastes to other sites that are going to be your Superfund sites in the future, and this is now, even after we know that this is the case.

Over the weekend, this last weekend, just to bring it right up to date, I saw that the Oversight Committee of the Energy and Commerce Committee that I serve on, has just obtained information about a California site that EPA has just been removing wastes to that again is, itself, a serious environmental problem. So simply containing wastes on site or moving them to another site in a shell game approach to this problem is not the way that we should be cleaning up these sites.

If we are going to spend literally billions of dollars to clean up Superfund waste sites over the next 5 years, we should at least insist upon a preliminary tilt toward permanent cleanup, where it is possible to be done. There is, in my opinion, no such thing as a secure hazardous waste landfill, that ultimately they will leak, you can put in all of the liners, all of the leachate collection systems that you want to, you can provide ground water monitoring wells, but the fact of the matter is that you will not obtain certainty in the way that you will if you try to have permanent disposal systems.

The definitive study on this whole subject, by the way, was conducted by a New Jersey professor at Princeton, Professor Montague, who explored five state-of-the-art disposal systems and concluded that all five of them were leaking, and this was in New Jersey, these were commercial facilities in New Jersey. So I would suggest to you that there really is no such thing as a secure hazardous waste landfill.

I think what we find is that EPA has been cleaning up sites again and again and again, and we will continue to find that as long as we rely upon land-based disposal systems. The legislation which is developed by the House and which has been passed into law, at the House level, which hopefully the conference report will reflect more of than the legislation on the other side, does provide for, at the urging of Congressman Torricelli and with the support of the chairman and most of the other Members of the Congress, does provide for some opportunities for research and development moneys into new high-tech disposal systems, most of which, by the way, are not new Buck Rogers technology and not something for the year 2010, many of these systems already are starting to be developed.

They are close to being economically feasible to be applied, and that I am convinced that if we had vigorous enforcement of the existing environmental laws, cutting off the opportunity for inappropriate but cheap disposal on the part of industry, we would immediately move into the area where these types of technologies—and ones we can foresee in the immediate future will be economically feasible. We would be environmentally better off, and there are some economic virtues for developing this new blue-chip high technology waste disposal industry.

For a long time, the easy availability of low-cost land disposal has stunted the development of permanent treatment technology. We are on the verge of a scientific boom in this area if we can just get some active, aggressive implementation of the laws by the environmental agencies.

I am troubled today that even in the last 6 weeks we have seen the very opposite of what I would advocate as an aggressive approach that EPA should be following. I am making specific reference to a provision that I know both of you supported very actively that was included in the Resource Conservation Recovery Act Amendments of 1984.

You may recall that that law had as its major purpose the clear statement that we wanted to get waste disposal out of landfills. We stated that there were certain wastes that should not be put into landfills under any circumstances. We then put EPA on a track whereby they would spell out a regulatory system to implement that clear message on the part of the Congress.

Rather than doing that, what we have seen now in the preliminary regulations that EPA has just announced its undertaking, is a perverse misreading of the statute that said that you shall not dispose of these wastes in these landfills. So as to send out the opposite message, EPA saying that you shall be allowed to dispose of these wastes in the landfills except under certain circumstances. That entailed for the most part tracking these wastes to find out if they are polluting adjacent ground water systems.

When you get that type of misreading of the clear statement of the law, you have to start raising questions as to what is the ultimate goal of the agency that's supposed to be protecting our environment.

My committee is going to be holding congressional hearings on this blatant misreading of the clear intent of the statute that we passed just as recently as less than 1 year ago, to try to get some understanding as to why the Agency is doing this sort of thing when it is clearly not the case.

I would hasten to add, and I shouldn't tar the Agency with a broad brush, because we already have information from some inside the Agency that they equally regard this as a misreading of the intent, and it is a matter of public record that the people in the Agency, the professionals, who are unfortunately charged with putting these regulations forward, have stated that they think this is a perversion of what the Congress' intent was all about.

Mr. Chairman and Congressman Torricelli, let me just rush through this by concluding—I think I made the major point that I wanted to make—that we have got to have the concurrence of the regulatory agency in aggressively enforcing the laws so that we can change the economics, do the thing that I know that Congressman Torricelli is most interested in doing, which is to provide for the research, provide for the inducement on the part of the private sector to become involved in permanent treatment so at the end of the next 5 years, even if we get the money that we hope will be available, we will be in a situation to finally put some of these sites behind us and not be waiting for, as the chairman made reference to the Pittston-Butler Tunnel Site, a site that was signed off as being clean only to find a strong rainfall washing wastes out into the Susquehanna River. We want to put these behind us and say with a degree of certainty that they are gone. We are not going to do that as long as we are containing, we are not going to do that as long as we are involving ourselves in moving wastes around from site to site.

I obviously stand ready to be of assistance to your subcommittee and to you individually in terms of trying to address some of these problems that you have played a key role in focussing upon.

Thank you.

[The prepared statement of Mr. Florio follows:]

STATEMENT OF
THE HONORABLE JAMES J. FLORIO, CHAIRMAN
SUBCOMMITTEE ON COMMERCE, TRANSPORTATION AND TOURISM
BEFORE THE
SUBCOMMITTEE ON NATURAL RESOURCES, AGRICULTURE RESEARCH AND ENVIRONMENT
OF THE
COMMITTEE ON SCIENCE AND TECHNOLOGY
FIELD HEARING ON
STATUS OF SUPERFUND CLEANUPS IN NEW JERSEY
JANUARY 27, 1986

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to testify before you today regarding the status of Superfund cleanups in New Jersey.

Anyone reviewing the histories of the seven site cleanups that are the focus of this hearing cannot help but feel frustration at the slow pace of cleanup. It is not only New Jersey where the pace is slow, but the entire country.

We have known about the problems at these New Jersey sites -- which include four of the 25 worst sites in the state -- for an average of five years. One site has been a known problem for over a decade. And yet not a single site has been cleaned up to date; most of the sites, preliminary feasibility studies have barely been initiated.

Instead, state and federal officials have consumed considerable resources in legal wrangling with the private parties responsible for creating the sites while the threat to public health remains unabated.

For example, the Berry's Creek site in Bergen County has been a known public health hazard for over a decade. In 1976, the New Jersey Department of Environmental Protection (DEP) filed suit against the companies which had allegedly caused the contamination and the state has been litigating their liability through the courts ever since.

Not until 1984 did the state attempt to obtain Superfund money to finance preliminary studies of the site. At about the same time, and probably because the state and EPA finally indicated that they were getting serious about the site, the companies finally agreed to finance the same studies. The studies will not be completed until January 1988 and then it will take another two and a half years -- if everything goes well -- to initiate and complete actual cleanup.

This schedule means that the people of Bergen County will not see completion of any action to deal with dangerous mercury contamination of Berry's Creek until well into 1990 -- more than fourteen years after the state first filed suit.

The chief goal of the original Superfund program was to avoid this kind of delay by providing federal money to finance cleanups while questions of legal liability were litigated. But we have fallen far short of this goal in New Jersey. The sad story of the Berry's Creek site is unfortunately typical of the implementation of the Superfund program in the state.

As you know, Mr. Chairman, over the past two years, we have all worked hard to formulate Superfund reauthorization legislation which will revitalize this troubled program. Your leadership, and the important contributions of my fellow delegation members Bob Torricelli, Jim Howard and Bob Roe, finally bore fruit this past December when the House passed by an overwhelming margin a Superfund bill that would commit $10 billion to a second five-year installment of the cleanup effort.

As important as this dramatic increase in funding level are the fundamental reforms of the program which the bill contains. For the first time, the bill would put EPA on a strict, mandatory schedule requiring the agency to begin cleanups at no fewer than 600 priority sites over the next five years. For the first time, the bill would establish strong, uniform national standards for determining how clean a site has to be before it is removed from the National Priorities List. For the first time, the bill would require the federal government (including the Department of Defense) to take full responsibility for the thousands of abandoned hazardous waste sites which were created, owned and operated by federal agencies.

The House is now on its way to a conference with the Senate and I am hopeful we will see final Superfund legislation begin to take shape over the next few weeks. I intend to work closely with my colleagues to advocate that the crucial provisions I just mentioned are included in the final package.

One of these provisions deserves special mention in the context of this hearing and in the time I have remaining, I would like to stress its importance. Of course, the members of this Subcommittee played a key role in developing this proposal and I cannot resist the temptation to preach to the choir about it. I am, of course, referring to the provisions in the bill requiring increased research and development regarding waste minimization and the permanent treatment of toxic wastes.

The cleanup of Superfund sites has been hampered in recent years by EPA's unwillingness to aggressively explore treatment technologies that will permanently eliminate the hazards of toxic wastes. Since the Superfund program began, the EPA has relied principally on containing Superfund wastes or, even worse, moving the wastes to other unsafe landfills. We can hardly be satisfied with a Superfund cleanup that resembles a shellgame -- simply moving wastes from one waste to another. And landfill containment using caps and liners has also proven to be woefully inadequate.

If we intend to spend literally billions of dollars to cleanup Superfund waste sites over the next five years we should at least insist upon permanent cleanup of hazardous wastes. Congress has stated time and time again that landfills are not the answer to toxic waste disposal no matter how many liners, leachate collection systems and groundwater monitoring wells we require. Every landfill will eventually leak -- maybe not today or tomorrow, but in the end we can expect every landfill to pose a threat to our groundwater.

Not only do landfill solutions pose health and environmental threats, in the long run they will simply cost too much. EPA will find itself cleaning up a contained site many times over as liners give way and caps leak. Wastes shifted from a Superfund site to an operating landfill will have to be moved again when the operating site begins to leak, all at the taxpayer's expense. Unless we take a different approach, we will continue to waste millions, even billions, of dollars for "cleanups" that merely shove today's problems off until tomorrow.

The legislation developed by this Subcommittee and others in Congress, if enacted, will put us on the road to a real, lasting solution. The pending Superfund legislation contains provisions that will encourage expanded research and development into the permanent treatment of toxic wastes which EPA will be required to use for Superfund site cleanups. Fortunately, many of these technologies are on the shelf waiting to be used, or are only a few years away from development. And we can expect that in the years ahead, the private sector will also devote substantial energy to the development of treatment technologies as federal laws make it increasingly costly for businesses to simply dump their wastes into a backyard pit.

For a long time, the easy availability of the low-cost landfill has stunted the development of permanent treatment technologies. But what was once a plodding research effort has become a scientific boom industry and the pending legislation will give it an even bigger boost. Researchers are exploring everything from microwaves to sponge-balls, from plasma guns to microorganisms. Even the cutting edge of the genetic engineering field has focused on toxic waste treatment.

I cannot stress enough the importance of ensuring that the research and permanent treatment provisions of the pending Superfund bill are enacted and promptly implemented by EPA. The dangers in delay are not merely academic, or even a matter of dollars and cents. In many instances, we are talking about an immediate health threat to thousands of New Jersey families.

As an example, look at the radon sites the Subcommittee is reviewing today. I have met with or heard from dozens of New Jersey parents who are deeply concerned about the health consequences to their children and themselves from daily exposure to radon gas. Everybody agrees that these families are exposed to unsafe levels of radon gas and everybody agrees that something has to be done immediately. But what?

Excavating radon-contaminated soils would involve moving literally thousands of tons of soil from these sites to landfills elsewhere in New Jersey or in other states. Because of the sheer volume of waste soils involved, we must explore technologies for reducing or eliminating the threat from radon gas. Consequently, I have strongly supported provisions in the pending Superfund bill that would require the EPA to conduct extensive research to find better ways to deal with this critical problem.

In the end, we must approach all Superfund sites with a goal of permanent treatment, because what we fail to properly treat today will haunt us tomorrow. This goal makes the research and development aspects of the pending Superfund bill a vital linchpin to the long-term success of the program. And, as the example of radon sites makes clear, the issue here is not one of money or EPA competence. The issue is the health of families throughout New Jersey and across the country.

I am sure this Subcommittee will do all it can to ensure that these technologies will be developed and used by EPA in its cleanup effort and, as Chairman of the Subcommittee that oversees the Superfund program, I can assure you that I will closely monitor EPA's implementation of these and other provisions that affect Superfund sites in New Jersey. Once again, I would like to thank the Subcommittee for providing me with this opportunity to share my views.

Mr. SCHEUER. Thank you very much, Mr. Chairman, Mr. Florio, for your testimony and for the very extensive job you have done in an energetic fashion in which you have pursued the implementation of the Superfund bill of which you were the original author, and I congratulate you for having produced this year a final result that was far better than the original product that came out of the congressional committee through your efforts and your leadership.

The final congressional result was a very vast improvement over the somewhat watered-down one that the special interests, the polluters, managed to—to produce from the Energy and Commerce Committee.

Congressman Torricelli.

Mr. TORRICELLI. Thank you, Mr. Chairman.

Mr. Florio, first I want to thank you for both your comments but, more importantly, your stance in what was probably the most important work that our committee has done this year, which is our amendment for a new technology to toxic waste, something we all believe in very strongly. In the best cases that we will discuss today as we review the toxic sites of Bergen County, in those instances where there are successes or successes pending, all we will largely be talking about in most instances is moving toxic wastes to new locations, a toxic shell game. Our success can often be to the detriment of someone else's because the toxic strategy in America today is to move these wastes and make them somebody else's problem in the future, a different state or a different town, and always a different generation.

For the first time this Superfund legislation will open the door and require new technologies be used, not only to fund their research, but also to open for the major industries in America that already have these technologies, 26 of them which are ready today to begin destroying waste if the EPA would take advantage of the resources.

So for that I thank you for your comments, but, more importantly, your help. Because of yourself, because of Senator Moynihan and Senator Lautenberg, that the legislation will come to pass. Both the House and the Senate bill contain nearly identical provisions. So for whatever else may be at issue in the Superfund, new technologies are not. It will happen.

I was interested in—also in your comments inquiring about the failure to use the full powers of the law, what has been a local frustration in that we patiently await cooperative agreements with various corporations rather than using the funds available in Superfund, doing the work that is necessary and then entering litigation. That has been the story of our frustration. But I wondered whether you could put it in a larger context. As you look at the Nation, has that failure to use these powers here also been the story in the country or is it one with exception?

Mr. FLORIO. The answer is that it's been universally the case across the country, and I in some respects feel badly for the EPA people who were there now who are sincere and want to go forward with this. Because the wrong message went out at the beginning of this program. I'm convinced, and I've made this statement on the public record on a number of occasions, that if someone at the beginning had said to the responsible parties that we are really serious about this law, had gone and taken a couple of good case examples and had gone, cleaned up and then went after the responsible parties for the full—to the full extent of the law, people out there now who are responsible parties might have taken seriously the requests to come in early and to be more cooperative in getting these things done.

Unfortunately, we sent all the wrong messages out, that we were not serious about enforcing the law, and we are now in a situation where some industries have decided to just tough things out, protracted negotiations, long litigation, making a determination that that's in their better economic interest than being more forthcoming, coming up front and starting to clean up.

Now, that is not universally the case. Industry is starting to get a better attitude toward some of these problems, and you are seeing a little bit more of a forthcoming approach in certain areas.

I think the other point that I bring to your attention on this is that in light of the Gramm-Rudman problem, in light of the budgetary problems that we are going to face, and I think it is clear, by the way, that Superfund is going to be able to be sequestered under the interpretation most people follow, which this year entails a 25-percent reduction in domestic programs, one of which will be Superfund if that whole process is followed through upon. We may as well accept the fact that there is not going to be a lot of money around for even things as laudable as research and development programs. What that means to me is that the private sector is going to be called upon to play a greater role, but they will not do it voluntarily. They're going to play that role because it is in their economic benefit to play the role, and that's why I'm very pleased about the growth of the hazardous waste industry. That is, those who are in that industry who see that as a lucrative field to be in. That's commendable. Because then what you have is the public interest and private interest paralleling each other, and there's no better way of getting the right thing done than to have that occur.

But over and above that, it also means that to induce the private sector to come in and do the right thing you are going to have to have a much more vigorous, aggressive approach on the part of EPA and the State agencies, in our case DEP, to say that we really mean to have cleanup and the law enforcement powers that we have are going to be exercised. Find one or two good cases. We have capability in the law that's very rarely, if ever, used, treble damage authority. I am convinced that if you found a good situation, and the Agency issued an administrative letter saying clean up and if you don't clean up we're going to clean up and assess you treble damages, find one good case, see that somebody sees that you are serious about it, the next time you go and talk to someone about getting—cleaning up taking place rapidly, they'll take you much more seriously than they currently do.

Mr. Torricelli. Mr. Florio, if you have a moment, I could only ask you to remain. Working with you in the future on some of the sites, it would be helpful, I think, if you knew where they were and something about them. We are going to do that very quickly if you could just remain.

I would appreciate, Mr. Chairman, if you could remain a few more minutes so we could do that.

Mr. SCHEUER. Fine.

Look, Mr. Torricelli, let me simply say, as I ask you to take over the chair, that you have played a remarkable role as a comparatively junior Congressman in making substantial contributions to a major piece of legislation like Superfund, and your amendment to provide for new and innovative technologies to pass Superfund and to end this business that Congressman Florio described, which is really moving around the deck chairs on the Titanic, moving one toxic site from here to there and feeling we've accomplished something, is a tremendous contribution, as I say, for a comparatively junior Congressman. All of us on the committee have been impressed with the remarkable work you have done, the great effort and leadership you have shown and your unswerving commitment to the health and safety and the environment of the American people. So with that I'm going to relinquish the chair to you. I'm going to ask you to continue interrogating, and the hearing of Congressman Florio, and then I will ask you to proceed with the witness list and handle the rest.

Mr. TORRICELLI [presiding]. Thank you, Mr. Chairman. I wondered if you could just remain for a moment while I go to the map and review the sites very briefly.

Mr. SCHEUER. Sure.

Mr. TORRICELLI. Mr. Chairman, thank you.

And before going I want to express my gratitude to you. This is the second time that you have allowed this committee to meet here in Hackensack in these chambers for this purpose, and the purpose is clear, to continue to focus attention on the outstanding sites in our congressional district. Ten percent of the leading 50 sites in New Jersey are located in this part of Bergen County, in the Ninth Congressional District.

Mr. Florio, the reason I had hoped you could remain for a moment just for this review is working together in the future of these sites I would hope we would each have the same and a clear understanding of what we are dealing with in our frustrations and the progress we have made to date.

First of all, we will find as we listen to company representatives, local officials, State and Federal officials, a mixed story. There have been some successes and some frustrations. Some companies have been cooperative and some have not. I guess we have learned more than anything else that the corporations are people. There are good ones and there are bad ones. Some have found the cost of cooperation to be worth pursuing. Others find intransigence to still be a better bargain than living up to their own duties and responsibilities.

The sites are varied in the problems they present. The most active site in recent time has been in Maywood. The problem with the Maywood site, largely a result of operations of the Stepan Chemical Corp., formerly Maywood Chemical Corp., is thorium, a radioactive thorium problem, resulting from production in World War I and World War II for the Federal Government. It is located in Rochelle Park, Lodi, and Maywood. Approximately 500,000 pounds of thorium-contaminated soil has been located. Much of that soil from residential properties, though not all, has now been removed from the ground. It remains in temporary storage in Maywood. A permanent site, however, is still required. To date the State, as we know, has not located a permanent disposal site for the thorium material, although it is in negotiations with neighboring States on a regional compact. Some removal remains to be done. To date the costs have been borne by Stepan Chemical Corp. and by the Federal Government.

Universal Oil Products, the site mentioned by Mr. Florio, in East Rutherford, priority number 16 in the State of New Jersey of our sites, by far the largest in Bergen County, consists of 85 acres in East Rutherford along Route 17. It's been estimated that 4.5 million gallons of waste solvents and solvent chemical wastes are dumped into unlined lagoons here. Its interaction with undersurface water is not known, but the site is, indeed, massive.

Edgewater, this facility consists of 61 above-ground tanks with a storage capacity of 9 million gallons of PCP's in 10 underground tanks with a capacity of 40,000 gallons of PCP's. The site is along the Hudson River. A removal plan is now underway.

Scientific Chemical in Carlstadt, probably the most frustrating of the Bergen County contaminated sites, is an inactive waste processing facility situated on a 6-acre tract of land on Patterson Plank Road. The company was formerly involved in recovery and recycling of various byproducts and waste solvents and other chemicals. Fifty-one tanks and 50 drums are on this site in Carlstadt. The corporation involved has clearly been the most uncooperative, both with my office and I believe with the Federal Government. Little or no progress to my estimation has been made on this highly dangerous site, with the most irresponsible of all corporate citizens.

Fairlawn Wellhead, three contaminated well fields contaminated by two companies in the nearby industrial complex. Water wells serve 32,000 residents of Fairlawn. It has been a mixed story, what I consider largely very cooperative corporations. We will hear more about it. It is too early to say yet that we have solved the problem, but we have received large-scale cooperation.

Kearny is in our congressional district in Hudson County. This is not a problem the making of Kearny, but rather involves 8,000 barrels of radium contaminated dirt located in an unused New Jersey Transit storage lot in the business and commercial section of Kearny. These radium contaminated soils have been brought here by the State as part of a larger solution involving properties in Essex County.

And finally, Berry's Creek. Berry's Creek, also located in East Rutherford, Woodridge, and Carlstadt as well, is the 21st ranked site in New Jersey. It is located on 40 acres bordering Berry's Creek and the Hackensack Meadowlands in East Rutherford, Carlstadt, and Woodridge. It involves heavy metals, leaving this site potentially in ground water and air and threatening extensive wetlands and a very large population. There are approximately 50,000 gallons of mercury that have seeped into Berry's Creek from the former processing plant.

That, Mr. Chairman, is a quick review of the principal sites. There is an additional site in Lodi, which we believe, though not yet conclusively have proof, is from the same source as the Maywood contamination. Each has been known for a number of years.

Today we will hear from State, Federal, local, and corporate representatives who will review the progress on each of these sites.

Mr. FLORIO. Mr. Chairman, let me just again pledge my continuing cooperation to you as the chairman of the committee as well as to my congressional colleague from New Jersey, Mr. Torricelli, in attempting to have full cooperation and resolve some of these problems that we have talked about today and the ones we know about across the country.

Thank you very much.

Mr. SCHEUER. Well, thank you very much, Congressman Florio. You have amply demonstrated your cooperation as well as your leadership over the many years, and we very much appreciate your testimony.

Mr. TORRICELLI. Thank you, Mr. Chairman.

The committee would now hear, please, from Christopher Daggett, region 2 Administrator, U.S. Environmental Protection Agency, accompanied by William Librizzi; John E. Baublitz, Acting Deputy Director, Office of Remedial Action and Waste Technology, Office of Nuclear Energy, U.S. Department of Energy; and George Tyler, assistant commissioner, environmental management and control, New Jersey Department of Environmental Protection.

Gentlemen, I thank you for your presence today and your continued cooperation to the problems we have been outlining.

If you have prepared statements, they will, of course, be entered into the record. If you would like to summarize them or make other comments, you are certainly welcome at this time.

STATEMENTS OF CHRISTOPHER DAGGETT, REGION II ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY WILLIAM LIBRIZZI; JOHN E. BAUBLITZ, DEPUTY DIRECTOR, OFFICE OF REMEDIAL ACTION AND WASTE TECHNOLOGY, NUCLEAR ENERGY, U.S. DEPARTMENT OF ENERGY; AND GEORGE TYLER, ASSISTANT COMMISSIONER, ENVIRONMENTAL MANAGEMENT AND CONTROL, NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. DAGGETT. Thank you, Congressman.

Let me begin, if I may, by extending my thanks to the subcommittee for affording me the opportunity to discuss the status of the Superfund in region 2.

With me today is William Librizzi, on my right, who is the head of the Superfund Program for us in region 2.

In June, 1983, as you know, my predecessor appeared before the subcommittee to talk about region 2's management of the Superfund program under CERCLA. She discussed both the progress made and the problems encountered in implementing Superfund.

Today, I will report on additional progress we have made in the program in general and at the sites in the Ninth Congressional District in particular. I will also outline some of the problems we are encountering as we carry out the program.

We have continued to advance toward the primary goal of the Superfund Program—controlling and remediating the hazardous waste sites that endanger human health and our natural resources.

We use the full range of tools available under Superfund to achieve that goal.

In the short term, removal actions are taken to alleviate immediate threats to public health and the environment by stabilizing a site, by removing particularly hazardous substances from a site or by providing alternate water supplies.

These actions can be undertaken whether or not the site is on the Superfund National Priorities List [NPL]. Longer term, carefully planned remedial actions are taken to clean up only those sites which appear on the NPL.

Where possible, we find the parties responsible for the contamination at the site and seek to have them pay for the removal or remedial work required so that we can conserve Superfund moneys for those sites where we cannot find capable responsible parties. We call the former sites "enforcement lead" to distinguish them from the latter "fund financed" sites.

We also take advantage of the States' commitment to cleaning up hazardous waste sites by dividing with them responsibility for given NPL sites. Thus, we refer to each site as either a State lead or Federal lead site.

We have made significant strides since 1983 under the fund-financed Remedial Action Program. Our achievements include, for example, installation of a new wellfield to replace the Atlantic City wells threatened by contamination from Price's Pit Landfill.

We have completed contruction of a containment system for the Lipari Landfill in Pitman and are moving into the next phase of cleanup there, flushing and treating of the water-transportable wastes.

We have completed excavation and removal of wastes from the Krysowaty Farm site in Hillsborough Township, where we provided local residents with an alternate water supply.

We have also carried out or are carrying out substantial Superfund remedial work at other NPL sites in New Jersey including: Bridgeport Rental & Oil Services; Burnt Fly Bog; Chemical Control; Spence Farm, and Syncon Resins.

The State of New Jersey has been at the forefront of the Remedial Program. For the past 5 fiscal years, New Jersey has been among the leaders in Superfund dollars obligated for remedial activities.

In fiscal year 1981, New Jersey ranked fourth; in 1982, second; and, in 1983 through 1985, first. Over this period, more than $75 million has been obligated for New Jersey remedial projects, representing more than 15 percent of obligated funds nationwide.

These dollars have translated into activity at many of New Jersey's 99 NPL sites.

At this time, activity has been initiated at half of the New Jersey sites on the NPL in the form of remedial investigations and feasibility studies. Nine sites are in the remedial design stage in New Jersey, and remedial action has been taken at eight sites.

As a complement to the Remedial Program, where the threat from a hazardous waste site is more immediate our Removal Program has also been effective.

Fifty-nine removal actions, for which $25 million in Federal funds were authorized, have been undertaken in region 2 to date;

32 are in New Jersey. Four of these were undertaken by responsible parties, and 13 involved substantial cleanups.

It is estimated that more than 23 million dollars' worth of removal activity has been initiated by the responsible parties, $18.3 million of which was in New Jersey.

In fact, region 2 was responsible for more than 70 percent of the money collected for privately funded Superfund removal actions nationwide as of July 1985.

Of particular note is the removal action underway in this congressional district at the Quanta Resources site in Edgewater. EPA provided $1.5 million for removal of in excess of 7 million gallons of contaminated liquids and sludges and repair of tanks and other containment structures at the site.

The action, started in April 1985, was aimed at preventing the site from contaminating the Hudson River due to tank or pipe failures and at reducing the threat of explosion and fire posed by the site.

Our enforcement efforts remain both aggressive and an important part of the Superfund Program, particularly in view of the lack of reauthorization of the Superfund taxing authority by the Congress.

Region 2 developed a major innovation that has streamlined enforcement activities at sites with multiple responsible parties.

In an effort to share the responsibility equitably among all companies involved at a Superfund site, we developed a computer program that has been used to distribute the cost of a cleanup site among the companies.

Agreements reached with the responsible parties at Quanta Resources and Scientific Chemical Processing in Carlstadt are excellent examples of the effectiveness of the computer program which now serves as a national model for apportioning costs among responsible parties.

Nine NPL sites in New Jersey have substantial cleanup completed or underway by responsible parties as a result of EPA enforcement efforts. The nine NPL sites are: Diamond Alkali; Pijak Farm; Renora, Inc.; Kin Buc Landfill; South Brunswick Landfill; Spence Farm; Swope Oil, the Tabernacle Drum Dump; Manheim Dump; and Scientific Chemical Processing in Carlstadt.

Non-NPL sites where substantial cleanup has resulted from enforcement actions include Bel Ray, Inc.; Duane Marine; Scientific Chemical Processing, Newark; Quanta Resources; and the I. Heller site.

In the past 2½ years, we have also resolved many of the organizational and institutional problems associated with start up of the Superfund program and have seen major advances.

One of the major changes in Superfund and one which has greatly accelerated the pace of the program is the delegation of much of the authority for decisionmaking on cleanup activity to the regional offices of EPA. Most authority for obligating funds for removal actions now rests with me, as Regional Administrator.

I also have greater authority to make decisions on selecting the remedial action alternative for sites appearing on the National Priorities List.

In most cases, I sign the Record of Decision for a remedial action alternative at a site. Only when the alternative recommended is very costly, unusual, or precedent-setting must the Record of Decision be approved by the Assistant Administrator for Solid Waste and Emergency Response in Washington.

Our planning and management systems have also improved since the early days of the program. We now have a formal planning process through which each site appearing on the National Priorities List is carefully examined to determine the quickest, most productive way to achieve remediation.

The region also develops a Superfund Comprehensive Accomplishments Plan [SCAP] which lays out the region's targets for both fund-financed and enforcement remedial actions on a fiscal year basis.

Additional changes in the Superfund Program are scheduled to go into effect on February 18 of this year. These changes are in the form of revisions to the National Contingency Plan, the document which outlines the procedures for taking appropriate removal and/or removal—remedial actions at Superfund sites.

The revisions are designed to clarify and streamline program operations based on the experience EPA has gained over the past 3 years.

Some things in the Superfund Program have remained constant since 1983. The level of Superfund activity in region 2 is still very high, a result both of the nature of industrial development and population density in parts of the region and the fact that both New Jersey and New York continue to be full partners with us in the Superfund Program, vigorously pursuing identification and cleanup of hazardous waste sites.

Although region 2 now ranks second among the 10 regions in total number of Superfund sites, with 166, New Jersey is still the State with the largest number of National Priority List sites, 99, reflecting the State's aggressive program.

Regrettably, not all of the constants in the program are on the plus side. We are still grappling with some of the practical and complex technical issues which my predecessor recounted for the subcommittee in 1983.

What kind of cleanup should we undertake at a site?

Second, is the required technology available to implement the cleanup desired?

Third, to what level must we take the cleanup to reassure the general public that we are being protective of health and the environment?

And, fourth, if we choose to remove the waste from the site, is there a safe, certain location for and means of disposal that will not be prohibitively expensive?

Questions such as these are every bit as perplexing today as they were in 1983, and new issues have arisen, including: Disposal facilities' compliance with the Resource Conservation and Recovery Act; liability insurance for contractors; program slowdowns due to expiration of CERCLA taxing authority; and finally, communication of risk.

Our decisionmaking process ensures that options involving treatment or destruction of wastes, rather than just containment or relocation, are evaluated.

But technology development is a long-term process, and the technology available for rendering wastes harmless lags behind our cleanup activity. We have seen some improvements such as the permitting and successful testing of EPA's mobile incinerator at Times Beach, MO.

We have made provision for some recovery and destruction of wastes at sites such as Lipari Landfill where we will flush and treat ground water. But prospects for removal and destruction of wastes on a large scale in the next 3 to 5 years, contrary to opinions expressed here this morning, are not promising. Onsite containment, therefore, may have to be the remedy of necessity at some Superfund sites.

But don't be misled by that statement. I have pushed my staff very hard in this regard and will continue to do so to try to push to get to the cutting edge of technology and use those technologies that are available to permanently clean up sites rather than just to be involved in it, as has been expressed here today, a toxic shell game where we only move our wastes from one landfill to another.

We are very aggressive in this area. Some of the problems we encountered, you talk about using a site or using a new technology to try something out, try something different; yet, when we do that we often encounter a very strong public opposition to that, because no one wants to be what they feel is a guinea pig for a new technology.

So, it is a very difficult area, one we are making progress on, but we do have a lot further to go yet. The other question of how clean is clean is one that we don't have easy answers for.

We are not required to restore a site to its pristine state. We are required by law only to select remedies which will protect public health and welfare, and we use standards set under other environmental statutes as guidelines for cleanup.

However, the simple application of other environmental standards is a complicated task given the complex, unique nature of the problems at each Superfund site and makes site-by-site determination of a remedy necessary.

More important is the question of how people are affected by hazardous waste sites. In concert with the Centers for Disease Control [CDC], EPA has developed risk assessment guidance which enables us to look at potential health impacts. CDC staff are now stationed within EPA's regional offices as risk assessment consultants, and data on Superfund sites are reviewed by CDC for potential health impacts.

Another major challenge related to Superfund that neither EPA, the medical community, nor the scientific community as a whole have yet resolved is how to communicate the concept of relative risk to the public. We need to make people better informed about what constitutes a significant risk to their health and to the environment, and what does not.

We must also do a better job of putting environmental risks in perspective with the myriad of other risks all of us face every day.

Unless we can educate the public about the true nature and scope of the actual risks at each of the various hazardous waste sites, we cannot expect them to accept solutions that, while environmentally sound, protective of health, technically feasible and cost-effective, fall short of their desire for zero risk.

Finally, Superfund cleanups have become even more difficult than in 1983 because of the lack of adequate, safe offsite disposal facilities. This is a multifaceted problem.

The Superfund off-site policy which has been developed since 1983 seeks to avoid future problems by prohibiting disposal of Superfund wastes at facilities violating the requirements of the hazardous waste management program under RCRA.

Therefore, the number of existing disposal sites which can receive Superfund wastes is limited and even decreasing.

The not-in-my-backyard syndrome further limits the availability of disposal sites. The conflict over disposal of radioactive wastes from the Montclair/Glen Ridge/West Orange radon sites is a classic example of that NIMBY syndrome.

Every site which has been proposed for interim or permanent containment of the radon wastes has almost immediately engendered public opposition and considerable controversy, even though the soils themselves can be stored in a manner that present no threat to public health or the environment.

As a result of this, drums of soil removed by the New Jersey Department of Environmental Protection remain at a site near the Kearny railroad yard and in Montclair until an interim storage or permanent disposal site is located.

Generally speaking, the prevalence of the NIMBY syndrome makes the use of existing facilities difficult and also hinders the siting of new, environmentally sound disposal facilities.

In 1983, no one expressed very much concern about the issue of liability insurance for Superfund contractors. Now, contractor liability is becoming an increasingly important issue as more projects proceed to the construction phase.

Last year, only one insurance company extended coverage to Superfund contractors and that company is not issuing any new policies this year. This means that only one or two large firms will be capable of accepting Superfund construction jobs. Smaller firms will be unable to submit construction bids because of their inability to afford or even obtain the insurance.

New Jersey, as you know, recently enacted legislation which would limit contractors liability to damages caused by their own negligence.

Unless other States follow New Jersey's lead, lack of insurance for contractors could have a far reaching effect on Superfund.

A more immediate challenge to our progress is the expiration of Superfund taxing authority which 4 months ago stopped the flow of revenue to clean up abandoned hazardous waste sites.

Until agreement is reached on reauthorization, work on many abandoned hazardous waste sites has slowed down because funding has run out.

Work at several other sites which is ready to be started cannot begin until region 2 gets the needed funding. This leaves us in a difficult position, but one we are trying to make the best of.

For example, since we do not have the revenue to do more remedial work, we made arrangements with headquarters to allow the States to provide funds in advance and to be reimbursed later, if and when funds become available.

Both New Jersey and New York are working with us on these special financing arrangements for several sites. New Jersey has agreed to date to commit a total of $30 to $35 million for work at 10 sites that are scheduled for remedial work in fiscal year 1986.

The first two State Superfund contracts with New Jersey using the advance funding concept were signed by me on November 25, 1985, for Bog Creek Farm, $750,000; and Helen Kramer Landfill, $2 million. A third, D'Imperio Property, $4.2 million was signed on January 17, 1986.

Other sites scheduled for advanced funding are: Bridgeport Rental and Oil Services, D'Imperio Property, GEMS Landfill, Goose Farm, Lipari Landfill, Lone Pine Landfill, and Swope Oil.

Now, with respect to the sites in the Ninth Congressional District, detailed summaries are attached to the statement here. What I would like to do is, rather than go through each one, I will just focus on the one that is a Federal lead site, Scientific Chemical Processing is in Carlstadt, which, as you know, is a Federal enforcement lead project.

I believe, as you also know, in 1984 under State oversight, some 50 drums and another 50 or 51 tanks were removed. Then, in October 1985, the surface cleanup had not quite been completed. So, the property owner was issued a unilateral administrative order to complete a surface cleanup on the site by March 1986. As part of that order, the company was required to submit a work plan to EPA by January 16, several days ago.

As of today, however, the company has not complied with that order. On the 21st, last week, we issued another order telling them that they were not in compliance and that they should be so by last Friday, the 24th. As of this morning, we had not yet heard from them. As a result, penalties of some $5,000 a day are now accruing as of January 21.

There are a number of options we can take at this point which I would be happy to talk about, if you want to get further into it in questions.

In addition, at that site, a consent order has been signed between EPA and 108 other responsible parties for the performance of a remedial investigation/feasibility study of the site, which should proceed in April 1986, after surface cleanup is completed.

A unilateral order was also issued to 31 responsible parties who did not sign that consent order.

In summary, I think we have made significant strides in the Superfund Program both nationally and here in region 2. I am confident that those strides will continue and even accelerate if the Superfund Program is reauthorized quickly and reasonably.

I appreciate the opportunity to appear before the committee, and I and my staff will try to answer any questions or concerns that you may have.

[The prepared statement of Mr. Daggett follows:]

STATEMENT OF
CHRISTOPHER J. DAGGETT
REGIONAL ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 2
BEFORE THE
SUBCOMMITTEE ON NATURAL RESOURCES, AGRICULTURE RESEARCH AND ENVIRONMENT
OF THE
COMMITTEE ON SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

HACKENSACK, NEW JERSEY
JANUARY 27, 1986

Good morning. I want to extend my thanks to the Subcommittee for affording me an opportunity to discuss the status of the Superfund program in Region 2.

In June, 1983 my predecessor appeared before the Subcommittee to talk about Region 2's management of the Superfund program under CERCLA. She discussed both the progress made and the problems encountered in implementing Superfund.

Today, I will report on additional progress we have made in the program in general and at the sites in the 9th Congressional District in particular. I will also outline some of the problems we are encountering as we carry out the program.

We have continued to advance toward the primary goal of the Superfund program -- controlling and remediating the hazardous waste sites that endanger human health and our natural resources. We use the full range of tools available under Superfund to achieve that goal. In the short term, removal actions are taken to alleviate immediate threats to public health and the environment by stabilizing a site, by removing particularly hazardous substances from a site or by providing alternate water supplies. These actions can be undertaken whether or not the site is on the Superfund National Priorities List (NPL). Longer term, carefully planned remedial actions are taken to "clean up" only those sites which appear on the NPL.

Where possible, we find the parties responsible for the contamination at the site and seek to have them pay for the removal or remedial work required so that we can conserve Superfund monies for those sites where we cannot find capable responsible parties. We call the former sites "enforcement lead" to distinguish them from the latter "fund financed" sites.

We also take advantage of the States' commitment to cleaning up hazardous waste sites by dividing with them responsibility for given NPL sites. Thus, we refer to each site either as State Lead or Federal Lead.

REMEDIAL PROGRAM

We have made significant strides since 1983 under the fund-financed remedial action program. Our achievements include, for example, installation of a new wellfield to replace the Atlantic City wells threatened by contamination from Price's Pit Landfill. We have completed construction of a containment system for the LiPari Landfill in Pitman and are moving into the next phase of cleanup there, flushing and treating of the water transportable wastes. We have completed excavation and removal of wastes from the Krysowaty Farm site in Hillsborough Township, where we provided local residents with an alternate water supply. We have also carried out or are carrying out substantial Superfund remedial work at other NPL sites in New Jersey including: Bridgeport Rental and Oil Services; Burnt Fly Bog; Chemical Control; Spence Farm, and Syncon Resins.

The State of New Jersey has been at the forefront of the remedial program. For the past five fiscal years, New Jersey has been among the leaders in Superfund dollars obligated for remedial activities. In fiscal year 1981, New Jersey ranked fourth; in 1982, second; and, in 1983 through 1985, first. Over this period, more than $75 million has been obligated for New Jersey remedial projects, representing more than 15 percent of obligated funds nationwide.

These dollars have translated into activity at many of New Jersey's 99 NPL sites. Superfund activity occurs in three stages. The first is the Remedial Investigation/Feasibility Study (RI/FS) during which site conditions are investigated and remedial solutions are evaluated. Following selection of the remedial alternative, we advance to the design stage during which detailed plans and specifications are prepared. The selected alternative is implemented during the third stage, remedial action.

At this time, remedial activity has been initiated at half of the New Jersey sites on the NPL in the form of remedial investigations and feasibility studies. Nine sites are in the remedial design stage in New Jersey and remedial action has been taken at 8 sites.

REMOVAL PROGRAM

As a complement to the remedial program, where the threat from a hazardous waste site is more immediate our removal program has also been effective. Fifty-nine removal actions, for which $25 million in federal funds were authorized, have been undertaken in Region 2 to date; 32 are in New Jersey. Four of these were undertaken by responsible parties, and 13 involved substantial cleanups. It is estimated that more than $23 million worth of removal activity has been initiated by the responsible parties, $18.3 million of which was in New Jersey.

In fact, Region 2 was responsible for more than 70 percent of the money collected for privately-funded Superfund removal actions nationwide as of July, 1985.

Of particular note is the removal action underway in this Congressional District at the Quanta Resources site in Edgewater. EPA provided $1.5 million for removal of in excess of 7 million gallons of contaminated liquids and sludges and repair of tanks and other containment structures at the site. The action, started in April 1985, was aimed at preventing the site from contaminating the Hudson River due to tank or pipe failures and at reducing the threat of explosion and fire posed by the site.

ENFORCEMENT

Our enforcement efforts remain both aggressive and an important part of the Superfund program, particularly in view of the lack of reauthorization of the Superfund taxing authority by the Congress. Region 2 developed a major innovation that has streamlined enforcement activities at sites with multiple responsible parties.

In an effort to share the responsibility equitably among all companies involved at a Superfund site, we developed a computer program that has been used to distribute the cost of a site cleanup among the companies. Agreements reached with the responsible parties at Quanta Resources and Scientific Chemical Processing, Carlstadt are excellent examples of the effectiveness of the computer program which now serves as a national model for apportioning costs among responsible parties.

Nine NPL sites in New Jersey have substnatial cleanup completed or underway by responsible parties as a result of EPA enforcement efforts. The nine NPL sites are: Diamond Alkali; Pijak Farm; Renora, Inc.; Kin Buc Landfill; South Brunswick Landfill; Spence Farm; Swope Oil, the Tabernacle Drum Dump; Manheim Dump; and, Scientific Chemical Processing, Carlstadt. Non-NPL sites where substantial cleanup has resulted from enforcement actions include Bel Ray, Inc.; Duane Marine; Scientific Chemical Processing, Newark; Quanta Resources; and, the I. Heller site.

I think it's important to point out at this time that my testimony focuses on EPA's removal, remedial, and enforcement actions. It does not include details of all the activities that New Jersey has underway both under Superfund and under its own state programs such as the small drum dump clean up program which are an important complement to Superfund,

ADMINISTRATION OF SUPERFUND

In the past two and one half years, we have also resolved many of the organizational and institutional problems associated with start up of the Superfund program and have seen major advances.

One of the major changes in Superfund and one which has greatly accelerated the pace of the program is the delegation of much of the authority for decision-making on cleanup activity to the regional offices of EPA. Most authority for obligating funds for removal actions now rests in the region. As Regional Administrator, I have authority to approve removal actions costing up to $1 million at any site which presents an actual or potential threat to public health or the environment whether or not that site is on the Superfund National Priorities List. I, in turn, have delegated some of that authority to the Director of the region's Emergency and Remedial Response Division who can approve removal actions up to a limit of $250,000.

I also have greater authority to make decisions on selecting the remedial action alternative for sites appearing on the National Priorities List. In most cases, I sign the Record of Decision for a remedial action alternative at a site. Only when the alternative recommended is very costly, unusual, or precedent-setting must the Record of Decision be approved by the Assistant Administrator for Solid Waste and Emergency Response in Washington.

Our Superfund staff has increased dramatically in size and has gained valuable experience. From fiscal year 1981 through 1985 staff devoted to Superfund grew from zero to 150 people. One hundred work in the Superfund office itself, while the others provide support to Superfund from other regional divisions. Fiscal year 1986 projections call for an increase to approximately 200 people. A hiring freeze was instituted in August, 1985, however, in anticipation of the expiration of Superfund. That freeze was lifted earlier this month but it will require time for us to get fully staffed. Plans for 1986 call for a significant increase of staff devoted to enforcement activities.

Our planning and management systems have also improved since the early days of the program. We now have a formal planning process through which each site appearing on the National Priorities List is carefully examined to determine the quickest, most productive way to achieve remediation. The first order of business for a new NPL site is a Responsible Party Search. The search, done by EPA or the State, determines whether there are responsible parties who could undertake remedial action. If no capable responsible parties are found, the site is earmarked for fund financing.

Federal or state lead is also designated at that time, and initial site study is begun. New and existing sites are periodically reviewed by EPA and the states to determine whether the remediation avenue chosen is still the most appropriate.

The region also develops a Superfund Comprehensive Accomplishments Plan (SCAP) which lays out the region's targets for both fund-financed and enforcement remedial actions on a fiscal year basis. Based on our experience, projections are made as to when we can expect to start and complete each of the three cleanup stages (remedial investigation/feasibility study; remedial design; and, remedial action) for each site. This document is reviewed by EPA and State agencies on a quarterly basis to insure that regional targets are being met. In addition, EPA and New Jersey staff meet monthly to review project status and to resolve any issues.

NCP CHANGES

Additional changes in the Superfund program are scheduled to go into effect on February 18, 1986. These changes are in the form of revisions to the National Contingency Plan, the document which outlines the procedures for taking appropriate removal and/or remedial actions at Superfund sites. The revisions are designed to clarify and streamline program operations based on the experience EPA has gained over the past three years.

For example, the extent to which Superfund operations must comply with other environmental statutes is clarified. Immediate and planned removals (two categories for actions at any site presenting imminent hazards to health and the environment) and initial remedial measures (a discrete remedial action that can be taken in advance of selecting a long term alternative) are all consolidated into the single category of removal action, and criteria for taking removal actions are spelled out more clearly.

The new NCP expands the scope of the Superfund removal program, allowing EPA to act more quickly at more sites requiring immediate attention. As you know, the removal action must, under CERCLA, cost no more than $1 million and be expected to last no more than six months. I have relied heavily upon those authorities in Region 2 and have acted in a great many cases to remove leaking drums, to empty chemical tanks and to provide clean drinking water to families affected by a contaminated water supply.

Some things in the Superfund program have remained constant since 1983. The level of Superfund activity in Region 2 is still very high, a result both of the nature of industrial development and population density in parts of the region and the fact that both New Jersey and New York continue to be full partners with us in the Superfund program, vigorously pursuing identification and cleanup of hazardous waste sites. Although Region 2 now ranks second among the ten regions in total number of Superfund sites, with 166, New Jersey is still the State with the largest number of National Priority List sites, 99, reflecting the State's aggressive program.

CONTINUING CONCERNS

Regrettably, not all of the constants in the program are on the plus side. We are still grappling with some of the practical and complex technical issues which my predecessor recounted for the Subcommittee in 1983:

- What kind of cleanup should we undertake at a site?
- Is the required technology available to implement the cleanup desired?
- To what level must we take the cleanup to reassure the general public that we are being protective of health and the environment?
- If we choose to remove the waste from the site, is there a safe, certain location for and means of disposal that will not be prohibitively expensive?

Questions such as these are every bit as perplexing today as they were in 1983, and new issues have arisen, including

- Disposal facilities' compliance with the Resource Conservation and Recovery Act.
- Liability insurance for contractors.
- Program slowdowns due to expiration of CERCLA taxing authority.
- Communication of risk

Our decision-making process ensures that options involving treatment or destruction of wastes, rather than just containment or relocation, are evaluated. But, technology development is a long term process, and the technology available for rendering wastes harmless lags behind our cleanup activity. We have seen some improvements such as the permitting and successful testing of EPA's mobile incinerator at Times Beach, Missouri. We have made provision for some recovery and destruction of wastes at sites such as Lipari Landfill where we will flush and treat ground water. But prospects for removal and destruction of wastes on a large scale in the next three to five years are not promising. Onsite containment therefore may have to be the remedy of necessity at some Superfund sites.

The question of how clean is clean is another for which we have not found easy answers. We are not required to restore a site to its pristine state. We are required by law only to select remedies which will protect public health and welfare, and we use standards set under other environmental statutes as guidelines for cleanup. However, the simple application of other environmental standards is a complicated task given the complex, unique nature of the problems at each Superfund site and makes site-by-site determination of a remedy necessary.

More important is the question of how people are affected by hazardous waste sites. In concert with the Centers for Disease Control (CDC), EPA has developed risk assessment guidance which enables us to look at potential health impacts. CDC staff are now stationed within EPA's regional offices as risk assessment consultants and data on Superfund sites are reviewed by CDC for potential health impacts.

Another major challenge related to Superfund that neither EPA, the medical community, nor the scientific community as a whole have yet resolved is how to communicate the concept of relative risk to the public. We need to make people better informed about what constitutes a significant risk to their health and to the environment, and what does not. We must also do a better job of putting environmental risks in perspective with the myriad other risks all of us face every day.

Unless we can educate the public about the true nature and scope of the actual risks at each of the various hazardous waste sites, we cannot expect them to accept solutions that, while environmentally sound, protective of health, technically feasible and cost-effective, fall short of their desire for zero risk.

Finally, Superfund cleanups have become even more difficult than in 1983 because of the lack of adequate, safe offsite disposal facilities. This is a multi-faceted problem. The Superfund off-site policy which has been developed since 1983 seeks to avoid future problems by prohibiting disposal of Superfund wastes at facilities violating the requirements of the hazardous waste management program under RCRA. Therefore, the number of existing disposal sites which can receive Superfund wastes is limited and even decreasing.

The "not-in-my-backyard" syndrome further limits the availability of disposal sites. The conflict over disposal of radioactive wastes from the Montclair/Glen Ridge/West Orange radon sites is a classic example of NIMBY. Every site which has been proposed for interim or permanent containment of the radon wastes has almost immediately engendered public opposition and considerable controversy, even though the soils themselves can be stored in a manner that presents no threat to public health or the environment. As a result of this, drums of soil removed by the New Jersey Department of Environmental Protection remain at a site near the Kearny railroad yard and in Montclair until an interim or permanent storage site is located.

The prevalence of the NIMBY syndrome makes the use of existing facilities difficult and also hinders the siting of new, environmentally sound disposal facilities.

In 1983, no one expressed very much concern about the issue of liability insurance for Superfund contractors. Now, contractor liability is becoming an increasingly important issue as more projects proceed to the construction phase. Last year, only one insurance company extended coverage to Superfund contractors and that company is not issuing any new policies this year. This means that only one or two large firms will be capable of accepting Superfund construction jobs. Smaller firms will be unable to submit construction bids because of their inability to afford or even obtain the insurance. Lack of insurance for contractors could have a far reaching effect on Superfund.

A more immediate challenge to our progress is the expiration of Superfund taxing authority which four months ago stopped the flow of revenue to clean up abandoned hazardous waste sites. EPA is pleased that the House of Representatives completed action on Superfund reauthorization in mid-December. Although we have serious questions about its proposal and the one by the Senate, we hope a reasonable compromise can be fashioned soon.

Until agreement is reached on reauthorization, work on many abandoned hazardous waste sites has slowed down because funding has run out. Work at several other sites, which is ready to be started, cannot begin until Region 2 gets the needed funding. This leaves us in a difficult position, but one we are trying to make the best of. For example, since we do not have the revenue to do more remedial work, we made arrangements with headquarters to allow the states to provide funds in advance and to be reimbursed later, if and when funds become available.

Both New Jersey and New York are working with us on these special financing arrangements for several sites. New Jersey has agreed to date to commit a total of $30 to $35 million for work at 10 sites that are scheduled for remedial work in fiscal year 1986. The first two state Superfund contracts with New Jersey using the advance funding concept were signed by me on November 25, 1985 for Bog Creek Farm ($750,000) and Helen Kramer Landfill ($2 million). A third, D'Imperio Property ($4.2 million) was signed on January 17, 1986. Other sites scheduled for advanced funding are: Bridgeport Rental and Oil Services, D'Imperio Property, GEMS Landfill, Goose Farm, Lipari Landfill, Lone Pine Landfill, and Swope Oil.

SITES IN THE 9TH CONGRESSIONAL DISTRICT

There are six NPL sites which are located in the 9th Congressional District of New Jersey. Detailed summaries of the status of each of the sites are attached to my statement.

Three of the sites are classified as State Lead/Enforcement Lead. These are (1) Universal Oil Products-Chemical Division in East Rutherford; (2) Ventron/Velsicol (Berry's Creek) in

Wood-Ridge Borough; and, (3) the Fair Lawn Wellfield. In each of these cases, the New Jersey Department of Environmental Protection has entered into consent orders with responsible parties who are undertaking cleanup actions.

The responsible party is in the process of conducting a Remedial Investigation at the Universal Oil Products site. EPA and New Jersey staff will meet shortly to discuss the results of all sampling to determine if any further sampling is required before the Feasibility Study is started.

The New Jersey Department of Environmental Protection has formed a Site Action Committee at Ventron/Velsicol to oversee the responsible parties planning and implementation of the RI/FS for that site which is targeted for completion in January, 1988.

Each of the responsible parties for the Fair Lawn Wellfield site is conducting clean up actions at its own facility,and each has agreed to pay for the restoration of the Borough's water supply and to reimburse the Borough for the costs of purchasing water from outside sources. Each party is in the process of completing its feasibility study.

Scientific Chemical Processing in Carlstadt is a Federal Lead/Enforcement Lead. In October, 1985, the property owner was issued a unilateral Administrative Order to complete a surface cleanup at this site by March, 1986. Also, a consent order has been signed between EPA and 108 other responsible parties for the performance of a RI/FS at the site which should proceed in April, 1986 after surface clean up is completed. A unilateral order was also issued to 31 responsible parties who did not sign the consent order.

The Department of Energy, under its Formerly Utilized Sites Remedial Action Program, is conducting remedial actions at residential properties known as the Maywood Chemical Sites on the NPL where soils contaminated with radioactives wastes have been found. All residential properties in Maywood and Rochelle Park have been decontaminated and contaminated soils recently discovered at residential sites in Lodi are being removed. In addition, later plans include removal of contaminated soils from commercial properties beginning in fiscal year 1986.

The State has identified a municipal well in Lodi with elevated radiological levels. At this sixth site on the NPL in the 9th C.D., the New Jersey Department of Environmental Protection is developing a sampling plan to determine the extent and origin of any contaminants that may be present. EPA will review and and comment on the State's plan and provide support during the analytic effort. We expect to provide our comments to the State during February, 1986.

I think we have made significant strides in the Superfund program both nationally and here in Region 2. I am confident that those strides will continue and even accelerate if the Superfund program is reauthorized quickly and reasonably. I appreciate the opportunity to appear before the Committee and I and my staff will try to answer any questions or concerns that you may have.

Thank you.

Attachments

UNIVERSAL OIL PRODUCTS - CHEMICAL DIVISION

Location: East Rutherford, New Jersey (Bergen County)

Description:

Universal Oil Products (UOP) is an inactive specialty chemicals manufacturing facility that was razed by the company in late 1980. The site is bordered on the Southeast by Berry's Creek with 1 of its tributaries, Ackerman's Creek, passing through it. Berry's Creek joins the Hackensack River about 3.5 miles downstream. Waste solvents & solid chemical wastes were dumped into an unlined lagoon located on the eastern part of the property. Surface and ground water as well as soil contamination has been documented.

Status:

On July 29, 1983 UOP entered into an Administrative Consent Order with the New Jersey Department of Environmental Protection (NJDEP) to conduct a Remedial Investigation (RI) at the site and recommend either additional sampling or select a remedial action alternative. The RI report was submitted on May 7, 1984. This report recommended a Phase II sampling program to further delineate the extent of contamination. On June 11, 1984, UOP submitted a proposal to conduct the Phase II investigation at the site. In July of 1984 UOP entered into an amended Administrative Consent Order to conduct Phase II.

Altogether a total of 25 groundwater monitoring wells have been installed, and extensive soil, surface water, and sediment sampling has been conducted. NJDEP and EPA plan to meet this month to discuss the results of all sampling to date, and to determine if any additional sampling is necessary prior to the initiation of a Feasibility Study.

§§§

VENTRON/VELSICOL (BERRY CREEK)

Location: Wood-Ridge Borough, New Jersey (Bergen County)

Description:

The Ventron/Velsicol Site was a chemical-processing operation from before 1953 until it closed in 1974. The site is on 40 acres bordering Berry's Creek and the Hackensack Meadowlands in Wood-Ridge Borough, Bergen County, New Jersey. The region is densely populated and industrialized. Heavy metals are leaving the site in ground water and air, threatening extensive wetlands and a very large population.

Status:

In January 1984, the responsible parties (2) initiated negotiations with the State of New Jersey for the purpose of developing a mutually acceptable Consent Agreement to conduct a comprehensive Remedial Investigation/Feasibility Study (RI/FS) addressing the mercury contamination. The companies' failure to sign a Consent Order by the July 1, 1984 deadline resulted in the NJDEP filing a Cooperative Agreement application with the United States Environmental Protection Agency (USEPA) for $1,220,000 in Superfund money to conduct the RI/FS. On September 28, 1984 the USEPA awarded this grant to the NJDEP.

Subsequent successful negotiations between the responsible parties and the State resulted in the signing of a Stipulation and Supplementary Order on October 15, 1984, which forms the framework for responsible parties to conduct the RI/FS under terms outlined by the NJDEP. In accordance with this Order, Morton-Thiokol and Velsicol Chemical have posted letters of credit totaling $1,210,000 to cover the cost of this study.

Currently, a Site Action Committee (SAC), has been established to oversee the planning and implementation of the RI/FS. The SAC, which will serve as the decision-making authority, consists of three NJDEP representatives and two representatives for the responsible parties.

The responsible parties have agreed to pay the entire cost of the RI/FS. They have also agreed to a Scope of Work developed by NJDEP. The RI/FS will determine the extent of contamination at the Berry's Creek Site and the surrounding ecosystem.

There are a total of ten tasks which comprise the RI/FS. They are as follows:

- Task 1 - Comprehensive Literature Search and Background Investigation
- Task 2 - Preinvestigation Activities
- Task 3 - Site Investigations
- Task 4 - Research Studies
- Task 5 - Selection of Remedial Response Objectives and Identification of Alternatives
- Task 6 - Modeling Predictability Studies
- Task 7 - Laboratory and Bench Scale Treatability Studies
- Task 8 - Evaluation of Alternatives
- Task 9 - Conceptual Design and Final Report
- Task 10 - Coordination and Community Relations

A proposal including a detailed technical approach, budget, personnel requirements, and a schedule shall be submitted for the RI/FS.

Of the following task descriptions, Task 1,2,3,4, and parts of 6 and 7 comprise the Remedial Investigation; Tasks 5,8, and 9 and the remainder of Task 6 and 7 comprise the Feasibility Study; Task 10 is peformed throughout the project. To date, Task 1 of the RI/FS has been completed and approved by NJDEP. The RI/FS is expected to be completed in January of 1988.

FAIR LAWN WELLFIELD

Location: Fair Lawn, New Jersey (Bergen County)

Description:

The Fair Lawn Wellfields (Wellfields) are located in the borough of Fair Lawn in the center of Bergen County, New Jersey. The Saddle and Passaic Rivers define the eastern and western boundaries of the borough, respectively. The Wellfields are composed of three separate wellfields and four additional deep wells. These municipal wells serve 32,000 people and provided 1,830 gallons per minute to the Borough of Fair Lawn until January 1979 when they were closed because of high levels of volatile organic compounds in the water. In March, 1979, after additional water sample tests were taken and it was determined that the contaminant levels were acceptable, all but four of the wells were reopened.

Status:

The New Jersey Department of Environmental Protection Division of Water Resources (NJDEP-DWR) determined that Fisher Scientific Company and Sandvik, Inc. were the parties responsible for the contamination at the site. In March 1984, NJDEP signed two separate Administrative Consent Orders with both companies The consent orders require that each company perform a cleanup of their facilities, and that each company pay the Borough of Fairlawn $610,000, which will be used to purchase purification equipment to restore the wells to service and also to reimburse the municipality for costs of purchasing water from outside sources. Both companies have completed a hydrogeologic investigation. Fisher's Remedial Investigation (RI) has been reviewed and approved; their Feasibility Study (FS) of alternatives for remediation is currently being revised at NJDEP's request and is due on February 24. Fisher's FS will include at a minimum, soil remediation and a groundwater treatment system. Sandvik has completed soil remediation and is developing a preliminary design for groundwater recovery which will serve as their Feasibility Study.

SCIENTIFIC CHEMICAL PROCESSING

Location: Carlstadt, New Jersey

Description:

This site was operated by Scientific Chemical Processing, Inc. as an industrial waste recycling facility from 1971 until it was shut down by court order in October, 1980. At that time, the site contained approximately 300,000 gallons of wastes stored in tanks, tank trailers and 55-gallon drums. There is extensive soil contamination from spillage due to poor housekeeping & maintenance. In addition, groundwater contamination is suspected

Status:

During 1984 the property owner, Inmar Associates, removed 51 tanks and tank trailers, and approximately 50 drums from the site, under the supervision of the New Jersey Department of Environmental Protection (NJDEP).

In the spring of 1985, the Environmental Protection Agency (EPA) identified 130 additional potentially responsible parties for this site. These include generators whose waste was stored, treated or disposed of at the site, transporters, and the operators of the Scientific Chemical Processing facility.

It was anticipated that Inmar Associates would continue the surface cleanup at the site, (the removal of the remaining 5 tanks), and EPA began negotiating with the other responsible parties for the performance of a Remedial Investigation/Feasibility Study (RI/FS). In September, 1985, EPA issued an Administrative Order on Consent to 108 Respondents, requiring them to perform a RI/FS pursuant to Section 106 of the Comprehensive Environmental Response Compensation and Liability Act, (CERCLA), 42 U.S.C. §9606. A parallel Unilateral Order was issued to 31 Respondents who did not sign the Consent Order.

During the summer of 1985, Inmar Associates ceased activities at the site. At NJDEP's request, EPA issued an Administrative Order to Inmar Associates on October 23, 1985, requiring them to remove four tanks and one tank trailer remaining at the site. That order required Inmar to submit a plan to accomplish that work. As of January 23, 1986, Inmar had not submitted an acceptable workplan. On January 21, 1986 we informed Inmar that it was in violation of the order and that we would initiate enforcement action unless an acceptable workplan is received by January 24, 1986.

Once the surface cleanup is finished, the RI/FS can proceed. The Respondents to the above-mentioned Orders have hired Dames & Moore, Inc. to perform the RI/FS. Their Work Plan and Operations Plan have been reviewed by both EPA and the NJDEP, and comments will be provided to Dames & Moore by the end of January. Their investigation will focus on determining the nature and extent of contamination in the vicinity of the site, through evaluation of groundwater, surface water and soil. Groundwater quality and flow patterns will be determined through the installation of 10 monitoring wells and four piezometers. In addition, soils at the site and Peach Island Creek, which is adjacent to the site, will be sampled. The Remedial Investigation is scheduled to take 30 weeks to complete. The Feasibility Study, which will develop possible remedial alternatives to implemented, will take 12 weeks to complete. The RI/FS report should be available for public comment and review by January, 1987.

LODI MUNICIPAL WELL

Location: Lodi, New Jersey (Bergen County)

Description:

The Lodi Municipal Well in Lodi, Bergen County, New Jersey, is contaminated with radium and its decay products, according to tests conducted by the State. In December 1983, the State closed the well, which is one of nine wells serving about 24,000 people. Other municipal wells are being used, but they draw from the same aquifer. The State is investigating to determine if ground water migrating from a nearby thorium-processing facility is contaminating the Lodi Municipal Well. Indications are that the contamination may be due to naturally-occurring uraniferous materials which are affecting the water supply.

MAYWOOD CHEMICAL SITES

Location: Maywood/Rochelle Park, New Jersey (Bergen County)

Description:

Maywood Chemical Works, which was purchased by Stepan Chemical Co. in 1959, was involved in the extraction of thorium for a period of about 50 years. The residues from the processing operation, clay-like dirt, contain significant levels of radioactive materials. Some of these tailings were moved over a period of time from the company's property and used as fill nearby.

Status:

The U.S. Environmental Protection Agency (EPA) initially addressed the radioactive contamination of the Maywood area properties in 1982. These actions led to EPA evaluation of the site and to its inclusion on the National Priorities List (NPL). Subsequent actions initiated by Congressman Robert Torricelli resulted in the inclusion of the site in a program administered by the U.S. Department of Energy (DOE), its Formerly Utilized Sites Remedial Action Program (FUSRAP). Under this program, the DOE receives funding and is responsible for remediation efforts.

In 1984, Borough representatives signed a Memorandum of Understanding (MOU) with the DOE allowing soils removed from Maywood area properties (and acknowledged as residues from the original processing operations) to be temporarily stored on part of the old site. The MOU agrees that "...radioactively contaminated soils originating from the Maywood site..." will be stored on the Maywood site, on land to be acquired by DOE...." The agreement further states that the "...DOE will remove any...soil stored [there]...to a suitable disposal site outside of the Borough within the State of New Jersey, to be selected by the State of New Jersey." In addition, the MOU states that "In the event that Congress does not direct the removal of all... contaminated soil,...the DOE will take whatever steps it deems necessary to stabilize such soil and waste in place...."

The DOE has proceeded with remedial activities at the site. While the State is the lead agent for supervising DOE activities, the EPA has maintained oversight of activities at the site, which is still included on the NPL. During our period of involvement, the DOE has attempted to comply with all applicable Federal and State regulations in performing these remedial activities.

Under the terms of its authorization, the DOE may remove only soils which are known to have been a part of the Maywood processing operation. The location designated by the original MOU for receiving the residues is a portion of the Stepan Chemical Company property in Maywood.

To date, all soils identified as originating at the Maywood facility have been removed from Maywood and Rochelle Park residential areas and returned to the original site in Maywood. In addition, some former portions of the site have also been decontaminated, with those soils placed at the temporary disposal location. A number of residential properties in nearby Lodi have also been screened and found to contain contaminated soils from the Maywood processing operation which were removed subsequently and used as fill. Therefore, the DOE is obligated under the authorization to include residues taken from Lodi properties in its disposal location. The DOE is now preparing to decontaminate those properties.

The DOE is scheduled to initiate all off-site remediation by Fiscal Year 1987. The disposal of all soils from the present Stepan property and the Maywood Interim Storage Site will be initiated after designation of a final disposal site by the State.

The MOU signed by DOE and the Town of Maywood is based on the belief that the State of New Jersey will designate a suitable low-level radioactive waste disposal facility within its borders. While the EPA cannot affect this type of decision-making process, we have been tracking the State's activities in this area. Based on our observations, it appears that there is progress, but that a suitable site will not be designated in the immediate future.

The State has identified a municipal well in Lodi with elevated radiological levels. While these may be due to naturally occurring materials in the vicinity, the New Jersey DEP is developing a sampling plan to determine the extent and origin of any contaminants that may be present. EPA will review and comment on the State's plan and provide support during the analytic effort. It should be noted that at no time were levels found be be above those accepted under the EPA's National Primary Interim Drinking Water Standards.

The analyses will include nonradiological constituents, which may be used to help identify the source of contaminants. Under its authorization the DOE is responsible only for remediation of radiological contaminants. EPA or the State may be required to pursue further remedial or enforcement action if nonradiological contaminants are identified.

QUANTA RESOURCES

Location: Edgewater, New Jersey (Bergen County)

Description:

The Quanta Resources facility was operated as an oil recycling and reprocessing facility from the 1970's until 1981. The facility consists of 61 above-ground tanks with a storage capacity of approximately 9 million gallons and 10 underground tanks with a capacity of roughly 40,000 gallons. Large quantities of chemically contaminated waste oil, including PCB's, oil sludges, tar, asphalt and process water were abandoned at the site. Additionally, large deposits of petroleum products have been identified in the soils on-site and the surface of the Hudson River adjacent to the facility is continually covered with a thick layer of weathered oily sludge.

Status:

In April, 1985, EPA commenced a removal action at the site to prevent further spills and to decrease the fire and explosion hazard. From April to October of 1985, EPA removed over 7 million gallons of contaminated water, oil and sludge from the site. In addition, leaking tanks were repaired, spills were cleaned up, and the oil/water separator was renovated. As part of this removal action, EPA also renovated the on-site railroad spur to enable the use of railroad cars for bulk liquid removal. Approximately $1.6 million was spent on these actions.

While performing this removal action, EPA was also negotiating with approximately 160 generators and transporters, who sent waste to the site. On Sept. 30, 1985 Allied Chemical, which opened and operated the site in the 1930's, signed an Administrative Consent Order (ACO) with EPA. The ACO consists of two major components:

1. The PRPs (i.e. generators & transporters) will contribute $5+ million to a trust fund for Allied's use.

2. Allied will perform the removal action in accordance with an EPA approved workplan and will contribute the additional funds needed to complete the work.

The removal action will consist of sampling, removing, and disposing of all wastes from all tanks, repair and upgrading of spill containment walls, maintenance of the oil/water separator, and air quality monitoring to protect personnel performing the clean-up as well as the public. The ACO also requires Allied to pay for all costs incurred by the U.S. Government in connection with the facility after June 14, 1985. The removal action is scheduled to be completed in August, 1987.

A unilateral order was issued to forty-seven non-contributing PRPs on October 16, 1985. This order requires sampling of the soil and Hudson River sediments, sampling oily waste from the surface of the Hudson River, repair and maintenance of the fire protection system, removal of two tanks, and removal of visibly contaminated soil. Reimbursement of U.S. Government costs prior to June 15, 1985 is also required.

While regulatory requirements such as obtaining a RCRA Part A permit to handle hazardous waste at the site, finding permitted disposal sites, and studying disposal options such as incineration and landfilling are being addressed, Allied has been working on-site to prevent further release of contaminants into the environment. Contaminated aqueous material from tanks is being removed from the site to an approved disposal facility. Waste is being transferred from tanks in poor condition to tanks in better condition.

Mr. Torricelli. Thank you, Mr. Daggett.

Mr. Daggett, the purpose of these hearings is to bring forward the names of responsible parties, the nature of any agreements that have been entered into and the timetable for action on each of these sites.

Your predecessor began this process several years ago. We are going to continue it in each new Congress in each new year to insure that the people know the dangers that are in their own communities and what progress is being made, no matter how small it might be.

Now, I think what would be most useful now is for you, each of you gentlemen, to review in some detail each of these sites and what progress has been made and what we can expect in the future.

First, it is my understanding that Edgewater is also a Federal lead site. Has that switched?

Mr. Daggett. It is not actually a Superfund site. It is not on the list, and yes, we are——

Mr. Torricelli. But it is an EPA lead site.

Let me ask you, in the context of Edgewater and Carlstadt, are you predicting an impact on either site because of the Gramm-Rudman budget cuts you are now seeing, and what is that going to do to your staff in the management of the agency or because of the Superfund impasse?

Is your ability to work on either site or to continue to monitor them going to be affected?

Mr. Daggett. Not in the short term. We have been in a good situation, actually, here in New Jersey in that with the sites that are on the Superfund list where there has been some question as to whether we could provide adequate funding for the cleanup, the State has agreed to essentially front the money, front their matching portion of the money to us to enable us to continue work on the sites nonstop.

Now, that looks good for the near term. For the long term, where we might run into a problem is the contractors we are using for those sites are national contractors out of EPA headquarters.

If the funding problems continue, in that the bill is not reauthorized, we will, as we indicated Friday in a briefing before some of the staff of the Congress, we will end—have to terminate those contracts, those national contracts.

As a result, then, it doesn't matter whether I have got the money or not. I don't have anybody to give it to. So, in the short term, we don't expect the problem to continue as we have been going. In the long term——

Mr. Torricelli. So you are spending State money first, and there is not a problem on our sites unless in the context of a national——

Mr. Daggett. That is right. So far, there is still some Federal money waiting, but increasingly, it is becoming State money.

Mr. Torricelli. So, this is a 1987 problem, not a 1986 problem. Let's look at the Edgewater site for a moment.

Of the 61 above-ground tanks, 9 million gallons in the 10 underground tanks, what remains to be removed?

Mr. DAGGETT. If I may—I would prefer to have Mr. Librizzi answer that. Also, the on-scene coordinator, John Witkowski.

Mr. TORRICELLI. I would like to go through this in some detail, if we could. Do you want to just move up to the microphone.

Mr. DAGGETT. With me also is John Witkowski, coordinator for that site.

Mr. TORRICELLI. In fairness to the other witnesses as well, we are going to do this for each of the sites in some detail, if we can. That's our principal purpose here, to establish for the record where we are.

If you would identify yourselves and your position for the record, please.

Mr. LIBRIZZI. My name is William Librizzi. I am the director of the Superfund Program for region 2.

Mr. TORRICELLI. Basically describe what remains to be done and how much has been removed.

Mr. LIBRIZZI. Let me just reiterate what the condition was at the site before EPA took its initial action and before we entered into a consent order with the responsible parties. We had 61 above-ground tanks which contained 9 million gallons of capacity. We had 10 under-ground tanks with 40,000 gallon capacity. Those tanks contained large quantities of chemically contaminated waste oils, PCBs and such.

We initiated our removal action using Superfund money in April 1985, and during the period April through October, 1985, we removed 6 million gallons of contaminated water, oil sludges, we repaired leaking tanks, we refurbished the oil water separator to improve its operation.

So, basically, what we have next to deal with, and they are being dealt with in a consent with responsible parties, is the remaining contaminated liquids, the remaining sludges that still exist at the site, and basically highly contaminated soils.

Mr. TORRICELLI. Is your strategy for continued removal to be by rail with the actual physical transportation of the material out?

Mr. LIBRIZZI. Yes. We are looking at moving by rail to a RCRA-approved facility. I will defer that to our on-scene coordinator, John Witkowski, if you need more details relatative to exactly what we are doing.

Mr. TORRICELLI. You are not considering a destruction strategy, either at sea or on site, your strategy's entirely removal at this point?

Would you identify yourself, please?

Mr. WITKOWSKI. My name is John Witkowski. I am the region 2 EPA on-scene coordinator for the Quanta site in Edgewater.

Mr. Torricelli, you have asked several questions. Let me add to Mr. Librizzi's statement and pick up the last question last.

On site there's still about 400,000 gallons of contaminated aqueous material, some of which has to be treated either with polymers or some kind of separation system on site before it can be taken to the designated facility that would be treating the material for the responsible party that is now funding the operation.

The remaining—the larger portion of it, however, we feel, would be treated at the Dupont facility in Deepwater down in South Jersey. Of the remaining materials, because of the treatment capability at the Dupont facility, there is a limit to the quantity of oils that are in the material and the remaining portion, which would be about 100,000 gallons, would probably go to an oil and water treatment facility in Pennsylvania. Those materials would be taken off site by tank trunks rather than rail cars. The aqueous material going to Dupont would be taken to Dupont by rail cars.

Of the oils on site, there remain about 475,000 gallons of contaminated and partially treated oils on the site.

Mr. TORRICELLI. What is the rate of their current——

Mr. WITKOWSKI. It is difficult to say because—what the rate is. At this point, for instance, last week, we removed 40,000 gallons of contaminated aqueous by rail car. Because of weather and because of the layer of materials inside the tanks, it takes a long time to draw it out and transfer the material to a tank on site, which is then taken off site.

Mr. TORRICELLI. What is your target date for its complete removal?

Mr. WITKOWSKI. For all of the remaining materials—and the hardest materials to remove are remaining—we have about 24 months left.

Mr. TORRICELLI. Twenty-four months to remove the last materials?

Mr. WITKOWSKI. That is correct.

Mr. TORRICELLI. Is there a need for also destruction of the tanks that are on site?

Mr. WITKOWSKI. Because of suspected contamination of soil below the tanks, some of the tanks will have to be taken down.

Mr. TORRICELLI. Do you feel you have a sufficient commitment of funds at this point to complete the project in 24 months?

Mr. WITKOWSKI. Yes, we do.

I want to add that one of the largest problems at the site is about a million gallons of coal tar materials that would be taken and recycled through a coal tar processing facility owned by Allied Chemical. That decision to go ahead with that, with ourselves and the State, has recently been made, and the rate of removal of material over the next couple of months will greatly increase.

Mr. TORRICELLI. How about cooperation from the corporate owners? At this point, do you have your consent decrees with each complete, or are there any pending issues with potentially responsible parties?

Mr. DAGGETT. Basically, we have the moneys available to complete the removal portion, which is that surface cleanup. Then, as with any site like this, we would want to know what might go into the ground and what kind of remaining or residues, if you will, exists. We haven't dealt with that yet as part of the enforcement or——

Mr. TORRICELLI. Are you in negotiations with the responsible parties?

Mr. LIBRIZZI. I think the order only includes now the surface removal.

Mr. TORRICELLI. The consent order only includes the surface removal.

Mr. LIBRIZZI. Right. And there's a unilateral order that, in addition to those responsible parties who do not elect to sign the order on consent, we will be looking for them to do the additional work as well as provide the treble damages——

Mr. **Torricelli**. Are the tanks below ground?

Mr. **Librizzi**. Once the tanks are clean, once the surface cleanup is completed, we have to go in there and do a remedial investigation and feasibility study to determine what else needs to be done at that site to complete the cleanup.

Mr. **Torricelli**. So that is still a pending issue with them, the extent to which they will cooperate to get that done.

Mr. **Librizzi**. That is right. That will have to be dealt with later.

Mr. **Daggett**. If I may make a point, we have, as we have indicated—I have forgotten the exact number who actually signed the agreement—100—I forget how many signed it. About 130 or something like that signed the consent order. There is some 31 that didn't. What we have been trying to do is demonstrate good faith on the part of the companies that did come on board, if you will, is to issue this unilateral order to those who did not, to demand they take part in it. We feel if we are going to send the message out strongly, people ought to take part in it, we have the responsibility to really go hard after those who did not sign the order. That is what we are in the process of doing.

Mr. **Torricelli**. What is your deadline? How long are you willing to wait now before you ask them to respond?

Mr. **Librizzi**. I don't know if there is an established deadline right now. The first step we have got to do is do the surface cleanup. Then the next phase would be to go into the additional studies.

Some of the 31 have come in and joined the consent, and the others are now up for the treble damages that are part of it.

Mr. **Torricelli**. Those who have not now are past that threshold, are liable on treble damages?

Mr. **Daggett**. Let us get back to you with the details, which we'll be happy to fill your staff in on. We don't have them at the moment.

Mr. **Torricelli**. Is it too early to establish at least a ball park figure on the total costs?

Mr. **Librizzi**. Surface cleanup, we figure, would be somewhere on the order of $9 to $10 million.

Mr. **Torricelli**. $9 to $10 million on the surface. And I suspect you are not willing to venture a guess yet.

Mr. **Librizzi**. I would not venture a guess until we've done a little more additional work.

Mr. **Torricelli**. What I would appreciate having for the record and for my own work is an indication of your strategy on dates and deadlines of where we are going with the remainder of the people on the consent order.

Mr. **Daggett**. We will give you a copy of the consent order which names the companies it's on.

[The information follows:]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10278

RECEIVED
[illegible]

Honorable James H. Scheuer
Chairman, Subcommittee on Natural
Resources, Agriculture, & Environment
Committee on Science and Technology
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Scheuer:

Thank you for the opportunity to appear before the Subcommittee on January 27, 1986 to discuss the status of the Superfund program in Region 2. The following information concerning Quanta Resources, Inc. and Scientific Chemical Processing, Carlstadt, is being submitted for inclusion in the record in response to questions raised by Mr. Torricelli during the hearing.

Quanta Resources

A copy of the Administrative Consent Order signed by Allied Chemical with EPA on September 30, 1985 is enclosed for your information. Under the terms of this order, Allied will perform a removal action consisting of sampling, removing, and disposing of all wastes from all tanks, repair and upgrading of spill containment walls, maintenance of the oil/water separator, and air quality monitoring. Allied will also pay for all costs incurred by the U.S. Government in connection with the facility after June 14, 1985.

A group of approximately 140 generators and transporters who sent wastes to the site did not sign the consent order but did contribute more than $5 million to a trust fund which will be used by Allied to fund a portion of the removal action. A copy of the agreement governing this arrangement is also enclosed. Allied will contribute any additional funds that are required to complete the removal work.

Allied actually began work at the site in mid-November, 1985 and the action is scheduled to be completed in or before March, 1988.

A unilateral order, requiring sampling of soil, Hudson River sediments, oily waste from the River surface, repair and maintenance of the fire protection system, and removal of two tanks and visibly contaminated soil, was issued on October 16, 1985 to forty-seven potentially responsible parties who did not contribute to the trust fund.

These parties missed the first deadlines for selection of a coordinator and submission of a workplan set forth in the order and are essentially out of compliance with it. We have been contacted by one of the larger companies involved in the unilateral order for information on the other parties so that they might be contacted; however, we have not been approached by any other members or by the group as a whole. It is possible that the parties may be trying to reach an agreement among themselves before contacting EPA formally.

However, we intend to seek recovery of costs for work already performed at the site by EPA and to seek civil penalties for violations of the order. We will be working closely with the Department of Justice.

I would also like to clarify a response that was given at the hearing concerning the percentage of wastes from Quanta that will be destroyed or treated rather than just removed to another site for containment.

From April through October, 1985, EPA removed or treated in excess of 7 million gallons of material, including four million gallons of contaminated rainwater which were treated on site to meet National Pollution Discharge Elimination System (NPDES) standards and discharged into the Hudson River.

Approximately 2.8 million of 5 million gallons of materials were removed from above ground tanks on the site. The 2.8 million gallons consisted of 2.7 million gallons of aqueous materials which were treated both on and off site to meet appropriate standards. Seventy-five thousand of the 2.8 million gallons consisted of contaminated oils which were treated offsite and then recycled as fuel. The remaining 30,000 gallons of tank bottom sludges were solidified and sent to a landfill.

Approximately 2.2 million gallons of hazardous materials remain in the above ground tanks on site; 1.2 million gallons are scheduled for recycling into usuable products. Of the remaining 1 million gallons, we estimate that about 75 percent can be either treated or recycled. The other 25 percent, which consists of contaminated soils and tank bottoms, will be solidified and sent to a landfill.

Scientific Chemical Processing (SCP), Carlstadt

I am pleased to report that Inmar Associates submitted a workplan for the remaining surface cleanup activity at this site on Tuesday, January 28, 1986. Our comments on the workplan were sent to Inmar on January 30. On February 5, 1986, Inmar Associates began sampling activities related to removal of the PCB waste on site. The removal action will begin when analytical results of the samples taken from the 5 tanks on the site which contain PCB waste are received. They are expected in two weeks. Such analysis is necessary to determine the proper method for disposal of the PCB waste.

The surface cleanup is expected to take two months to complete after the results are received and will be overseen by EPA's Technical Assistance Team (TAT) contractor. Work on the Remedial Investigation/Feasibility Study (RI/FS) by the group of potentially responsible parties can begin thereafter and the report should be available for public review and comment by January, 1987.

Copies of the three orders concerning SCP Carlstadt, are enclosed for your information.

Please feel free to contact me or have your staff contact Alice Jackson Jenik of my office at (212) 264-4538 if you have any questions or need additional information.

Sincerely,

Christopher J. Daggett
Regional Administrator

Enclosures (6)

cc: Honorable Robert G. Torricelli
Commissioner Richard Dewling, NJDEP

QUANTA WELLS

COVENANT NOT TO SUE

1. This Covenant Not to Sue is made and entered into by and between the United States Environmental Protection Agency ("EPA") and the following parties:

A.L. Eastmond & Sons, Inc.
Active Oil Service
Alexian Brothers Hospital
Amerada Hess Corporation
Avco Lycoming Stratford Division,
  Avco Corporation
BASF Wyandotte Corporation
Becker Paribas Incorporated
Borg-Warner Automotive, Inc.
Bristol-Myers Products Division
Buckeye Pipe Line Company
Carrier Corporation
Chemical Leaman Tank Lines, Inc.
Chevron U.S.A. Inc. (formerly
  Gulf Oil Corporation)
Chrysler Corporation
Chubb & Son Inc.
City of Englewood, N.J.
Colonial Pipeline Company
Crescent Products Company
Dana Corporation (Turbo)
Exxon Corporation
Exxon Research and Engineering Company
Fairburn Park Associates and Fairlawn Estates
  Associates, d/b/a Fairlawn Properties and
  Fairlawn Park Estates
Ford Motor Company
General Dynamics Land Systems Inc.
Glenshaw Glass Company Inc.
Goulds Pumps, Inc.
GPU Nuclear Corporation, for itself and on
  behalf of
  Jersey Central Power & Light Co.,
  Metropolitan Edison Company, and
  Pennsylvania Electric Company
Harbor Petroleum Corp.
Heroux Inc.
Hitchcock Gas Engine Co.
Industrial Environmental Services, Inc.
Ingersoll-Rand Company
Koppers Company, Inc.
Marcal Paper Mills, Inc.
Merck & Co., Inc.
Miller Brewing Company

Monmouth County, N.J., Vocational
  School District
Morris School District
Morristown, N.J. Housing authority
NEAPCO Inc.
New Era Oil Service, Inc.
New Jersey Bell Telephone Company
Orange and Rockland Utilities, Inc.
Park View East Associates A/K/A Park East Apts.
Peugeot Motors of America, Inc.
The Port Authority of New York
  and New Jersey
Pratt & Whitney Group, United
  Technologies Corp.
Pratt & Whitney Canada Inc.
Presto Lock, Inc.
Public Service Electric
  and Gas Company
Quanta Holding Corporation
Quanta Resources Corporation
Rome Strip Steel Co., Inc.
Royal Lubricants Co., Inc.
Seaboard Service, Inc.
Sier-Bath Gear Co., Inc.
The Stanley Works
Triangle Mfg. Co. Inc.
TRW Inc.
Union Baptist Church
Ware Chemical
Waste Recovery, Inc.

("the Settling Parties").

2. WHEREAS, pursuant to Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), 42 U.S.C. 9604, based upon the entire Administrative Record, EPA has concluded that there has been a release or substantial threat of a release of hazardous substances into the environment from a facility located at One River Road, Edgewater, New Jersey (the "Site"). The property, located in the Borough of Edgewater, County of Bergen, comprises Block 95, Lots 1, 2 and 3 on the Tax Map of the Borough of Edgewater. The Hudson River forms the Eastern Boundary of the property, which lies at a point approximately parallel to West 93rd Street, Manhattan. It is further bordered by the Celotex Industrial Park property on the North, an industrial facility on the South and a railroad right-of-way and River Road; and

3. WHEREAS, pursuant to Section 107 of CERCLA, 42 U.S.C. 9607, the owner and operator of a facility; any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of; any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment of hazardous substances owned or possessed by such person; by any other party or entity at any facility owned or operated by another party or entity and containing such hazardous substances; and any person who accepted any hazardous substances for transport to disposal or treatment facilities selected by such person, from which there is a release

or a threatened release of a hazardous substance which causes the incurrence of response costs, may be liable for all costs of removal or remedial action incurred by the United States Government; and

4. WHEREAS, the President, through the authority legally delegated to the Administrator of EPA, has acted and is acting, consistent with the National Contingency Plan ("NCP"), to remove and arrange for removal of such hazardous substances, pollutants and contaminants, pursuant to Section 104 of CERCLA, 42 U.S.C. 9604; and

5. WHEREAS, the President, through the authority legally delegated to the Administrator of EPA, has taken other response measures not inconsistent with the NCP which were deemed necessary to protect the public health or welfare or the environment at the Site; and

6. WHEREAS, the above actions, taken pursuant to Section 104 of CERCLA, 42 U.S.C. 9604, caused the incurrence of response costs, pursuant to Section 107 of CERCLA, 42 U.S.C. 9607, totalling in excess of ONE MILLION DOLLARS ($1,000,000.00) to the date of EPA's signature of this Convenant; and

7. WHEREAS, costs of the response action at the Site were not incurred in a manner inconsistent with the NCP; and

8. WHEREAS, EPA has entered into an Order on Consent ("Order") with Allied Corporation ("Allied") by the terms of which Allied has agreed to continue to completion the performance of the activities described in Attachment A; and

9. WHEREAS, EPA intends to order the non-settling potentially responsible parties to perform certain removal activities at the Site, including, at a minimum, performance of certain sampling and chemical analysis, the removal and proper disposal of certain chemically contaminated soil at the Site, and the performance of decontamination and/or decommissioning of specified areas of the Site and/or appurtenances to the Site, and further to demand from such parties reimbursement of costs incurred by the United States in connection with the Site; and

10. WHEREAS, a trust fund will be established under the terms of the attached Trust Agreement ("the Trust Fund"). The estate of the Trust Fund will be funds provided by the Settling Parties pursuant to this covenant, and the purpose of the Trust Fund will be to reimburse Allied for the first FIVE MILLION DOLLARS ($5,000,000.00) in expenses incurred by Allied pursuant to the Order; and

11. WHEREAS, EPA desires to resolve the liability of the Settling Parties with respect to performance of the Removal Action specified in Attachment A, but not with respect to any Remedial Actions which may be necessary at the site, by entering into a Covenant Not to Sue in exchange for the payment by the Settling Parties of a fixed sum; and

12. WHEREAS, it is not the intention of EPA, by entering into this Covenant, to settle any claim, release any persons or entities, or to covenant not to sue, not to issue administrative

process or not to execute judgment against any person, firm, or corporation not a signatory to this Covenant; and

13. WHEREAS, it is the intention of EPA to seek additional relief from persons, firms, or corporations other than the Settling Parties for costs incurred by the United States and for injunctive or other relief to which the United States may be entitled at law or equity arising out of and resulting from the transportation, storage, treatment, handling, disposal or presence of materials at the Site; and

14. WHEREAS, the Settling Parties, by this document, intend to satisfy any and all liability which they may have with respect to any costs incurred with respect to matters within the scope of this Covenant; and

15. WHEREAS, EPA and the Settling Parties recognize and hereby intend to further the public interest in avoiding prolonged and complicated litigation between EPA and the Settling Parties and in expediting the recovery of costs incurred or to be incurred by EPA for surface removal activities at the Site; and

16. WHEREAS, it is the intention of EPA to retain its legal right to seek additional relief from the Settling Parties in the nature of injunctive relief or for recovery of costs incurred by the United States at the Site for response activities, other than surface removal activities, or for past and future costs incurred by the United States at any other site or for injunctive or other relief to which EPA may be entitled at

law or equity arising out of any occurrence resulting from the presence of materials at any such other site; and

17. **WHEREAS**, the Settling Parties, by the execution of this document, do not admit any issues of fact or law or any liability or responsibility for the alleged release of hazardous substances into the environment at the Site.

NOW, THEREFORE, in consideration of and in exchange for the promises, agreements, and mutual undertakings herein, and intending to be legally bound hereby, the Settling Parties and EPA agree as follows:

1. The Settling Parties shall pay or cause to be paid into the Trust Fund the total sum of FIVE MILLION DOLLARS ($5,000,000.00). On or before October 15, 1985, EPA will deliver a fully executed copy of this Covenant to the Settling Parties' Escrow Agent. On or before November 4, 1985, the Settling Parties shall deliver, or cause delivery of, FIVE MILLION DOLLARS ($5,000,000.00) to the Trustee for the Trust Fund.

2. In consideration of the Settling Parties' payment under the terms of this Convenant, EPA covenants not to bring any civil, judicial or administrative action or proceeding against the Settling Parties or their officers, directors or employees for any claim or cause of action relating to the Removal Action specified by the scope of work set forth in Attachment A, including work from April 1, 1985, through and including completion of the work described in Attachment A. This Covenant shall become effective upon receipt by the Trustee of the amount

described in Paragraph 1 above. To the extent that state law is deemed to govern liability arising from activities related to the Site and the interpretation of the terms of this Covenant Not to Sue, EPA and the Settling Parties do not intend this provision to serve as a general unqualified release. This paragraph should be construed as a covenant not to sue the Settling Parties only, and should not act to release any other party from liability.

3. This Covenant Not to Sue does not extend to liability for damage to natural resources, as defined in CERCLA.

4. EPA and the Settling Parties recognize the possibility that persons that have not agreed to this Covenant Not to Sue may bring or assert against the Settling Parties suits or claims for contribution for liability concerning matters within the scope of this Covenant Not to Sue and that, if successful, such suits or claims could obligate the Settling Parties to pay amounts in addition to the amount specified in Paragraph 1 above for such matters. It is the expressed intention of EPA and the Settling Parties that the Settling Parties not be required to pay amounts in contribution for such matters or be required to remain as parties in any suit or claim for contribution concerning any matters within the scope of this Covenant. It is also agreed that EPA shall be under no obligation to assist the Settling Parties in any way in defending against such suits or claims.

5. EPA and the Settling Parties represent that this Covenant was negotiated in good faith and that the Settling Parties' payment represents a fair and equitable assumption of

the Settling Parties' alleged responsibilities for covered matters considering, among other factors, the fact that it is in the best interest of EPA to encourage equitable settlements without burdensome litigation. EPA and the Settling Parties, for purposes of this matter, agree that federal law should govern questions of contribution among parties. EPA agrees that, in determining the appropriate federal rule of decision to establish the effect of this Covenant on possible rights of contribution, a court should adopt the principle set forth in Section 4 of the Uniform Contribution Among Tortfeasors Act.

6. EPA and the Settling Parties intend that this document shall be construed to be a Covenant Not to Sue only as to the Settling Parties.

7. EPA contemplates that it will assert claims for cost recovery, injunctive or other relief against persons, firms or corporations other than the Settling Parties to enable EPA and the United States to secure the complete relief to which they may be entitled at law or equity against any person, firm or corporation not a signatory to this Covenant for any liability such person, firm or corporation may have arising out of or relating in any way to the storage, treatment, handling, transportation, disposal or presence or actual or threatened release or discharge of any materials at, to, from or near the Site. EPA and the Settling Parties recognize that the consideration given by the Settling Parties does not represent satisfaction of any claims for relief to which the United States

may be entitled at law or equity against persons, firms or corporations other than the Settling Parties arising out of or relating to the storage, treatment, handling, transportation, disposal or presence or actual or threatened release or discharge of any materials at, to, or from or near the Site.

8. The Settling Parties' claim against any other party in any action or proceeding for contribution or indemnification of all or a portion of the cost of their settlement herein shall be secondary to the United States' claim against such other party for costs incurred in connection with matters within the scope of this Covenant, provided, however, that nothing in this Covenant shall restrict the right of the Settling Parties to seek cost recovery, contribution or any other remedy from persons not a party to this Covenant.

9. The Settling Parties agree not to make any claims pursuant to Section 112 of CERCLA, 42 U.S.C. 9612, or any other provision of law directly or indirectly against the Hazardous Substance Response Trust Fund established by CERCLA or other claims against the United States for expenses within the scope of this Covenant Not to Sue. Nothing in this Covenant shall be deemed to constitute preauthorization of a CERCLA claim within the meaning of 40 CFR §300.25(d).

10. The Settling Parties agree to timely notify EPA of the institution of any suit or claim for contribution brought against them for covered matters.

11. EPA retains its legal right to seek additional relief

from the Settling Parties in the nature of injunctive relief or for recovery of costs incurred, or to be incurred, by the United States at the Site for response activities other than surface removal activities, or for past and future costs incurred by the United States at any other site or for injunctive or other relief to which EPA may be entitled at law or equity arising out of any occurrence resulting from the presence of materials at any such other site.

12. The Settling Parties agree that they will preserve, for three years following payment of the sum prescribed in Paragraph 1 above, all records and documents in their possession and in the possession of any of their subsidiaries, divisions, parents, affiliates or their respective directors, officers, employees, agents, accountants or attorneys, which relate to any transactions or business with, or relate in any other way to the remediation of the Site, despite any document retention policy to the contrary. Notwithstanding any other provision of this Covenant, the United States retains whatever rights it may have under applicable statutes and regulations governing the collection of records and documents, which are the subject matter of this paragraph.

13. This Covenant applies to and is binding upon EPA and the undersigned Settling Parties and their successors and assigns. Each of the undersigned representatives of the Parties to this Covenant certifies that he or she is fully authorized to

enter into the terms and conditions of this Covenant and to execute and to legally bind such party to this Covenant.

14. In the event that the Settling Parties fail to make payment as specified herein, this Covenant shall be null and void.

EPA and the Settling Parties execute this Covenant by their duly authorized representatives.

THE UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY

BY: ______________________________
Courtney M. Price

____
Assistant Administrator for
Enforcement and Compliance Monitoring
____

DATE: ______________________________

QUANTA

ONE RIVER ROAD (EDGEWATER, N.J.) SITE TRUST FUND AGREEMENT

This Agreement, made this 27th day of September, 1985, by and between the undersigned (hereinafter, referred to as "Donors") and The Riggs National Bank of Washington, DC (hereinafter, referred to as "Trustee"),

WITNESSETH:

WHEREAS, the Donors have entered into a Covenant Not to Sue with the United States Environmental Protection Agency, Region II (hereinafter, the "Covenant" and "EPA", respectively); and

WHEREAS, the Donors are obligated under the Covenant to establish a trust fund for the purpose of reimbursing Allied Corporation (hereinafter "Allied") with respect to activities at the site located at One River Road, Edgewater, New Jersey (hereinafter, the "site" or the "facility"), as described in Attachment A to the Covenant (which is also attached as Exhibit 1 hereto) which Covenant shall create no independent obligations or duties of the Trustee; and

WHEREAS, the Donors have agreed among themselves to contribute funds to provide for the performance of the activities described in Exhibit 1; and

WHEREAS, the Donors intend through their escrow agent to deliver to the Trustee $5,000,000 (Five Million Dollars); and

WHEREAS, the Donors desire that such funds shall constitute a trust fund to be held by the Trustee and administered by the Trustee for the purposes hereinafter set forth; and

WHEREAS, the United States Environmental Protection Agency has been informed of the existence of this Trust Agreement by the Donors;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants herein contained the parties hereto agree as follows:

I. TRUST FUND

All donations received by the Trustee from the Donors' escrow agent (together with the income and/or interest therefrom) shall be known as the One River Road (Edgewater, N.J.) Site Trust Fund (hereinafter, referred to as the "Trust Fund"). The Trust Fund shall be established upon receipt by the Trustee no later than November 4, 1985, of the executed Authorization Forms together with the donation of $5,000,000 (Five Million Dollars) received by the Trustee from the Donors' escrow agent.

II. PURPOSE

The Trust Fund established hereunder shall consist of the donations received from the Donors, together with any income and/or interest earned therefrom, which sum shall be maintained exclusively for the purpose of discharging the obligations of the Donors under the Covenant, and compensating the Trustee under the terms of paragraph IV(B) hereof.

III. TRUST ESTATE

The Trust Estate shall consist of the Trust Fund.

IV. THE TRUSTEE

A. The Trustee does hereby contract, agree and covenant that it will execute the Trust herein declared, created and constituted, and that it does and will receive, hold and administer the Trust Fund hereinabove described in the manner provided in this instrument.

B. Compensation. The Trustee hereunder is authorized to receive compensation for its services rendered in connection with the administration of the Trust Fund from the income and/or interest earned by the Trust Fund in accordance with the Schedule appended hereto as Exhibit 2.

C. Bond and Liability. The Trustee shall not: (1) be required to furnish any bond or surety; (2) be held responsible for any loss sustained by the Trust Estate through any error or judgment made in good faith; or (3) be personally liable upon any contract or indebtedness of or claim against the Trust Estate.

The Trustee shall not be required to defend any legal proceedings which may be instituted against the Trustee with respect to the subject matter of this Trust Agreement (except legal proceedings arising out of the Trustee's negligence, malfeasance or breach of fiduciary duties owed to the Donors) unless requested to do so by the Donors and indemnified to the Trustee's satisfaction against the cost and expense of such defense. The Trustee shall not be required to institute legal proceedings of any kind. The Trustee shall have no responsibility for the genuineness or validity of any document or other item deposited with the Trustee, and the Trustee shall be fully protected in acting in accordance with any written instructions given to the Trustee hereunder and believed by the Trustee to have been signed by the proper parties. The Donors hereby agree to indemnify and hold harmless the Trustee against any and all losses, claims, damages, liabilities and expenses, including reasonable costs of investigation, counsel fees and disbursements, which may be imposed upon the Trustee or incurred by the Trustee in connection with the Trustee's appointment hereunder, including any litigation arising from this Trust Agreement or involving the subject matter hereof or the monies deposited hereunder, except that the Donors do not agree to indemnify or hold the Trustee harmless for negligence, malfeasance or breach of fiduciary duties owed to the Donors.

V. USE OF TRUST FUND

A. Payment to Allied. The Trustee shall, within five days (but no earlier than five days following the establishment of this Trust Fund) of notification by Allied and confirmation by EPA that Allied and EPA have entered into a Consent Order with respect to Allied's activities at the site as described in Exhibit 1 hereto and that the Regional Administrator, Region II of EPA and every donor have executed the Covenant, pay to Allied the entire $5,000,000 (Five Million Dollars) of the Trust Fund. Any payment to Allied under this Agreement shall be by check issued by the Trustee, made payable to "Allied Corporation" and shall be sent by certified mail, return receipt requested, to Allied Corporation, c/o David P. Cooke, Esq., P.O. Box 2245R, Morristown, NJ 07960.

B. Refund to Donors. All funds which remain in the Trust Fund upon termination of this Trust, if any, shall be transferred by the Trustee back to the Donors through their escrow agent. Each Donor shall receive that amount which bears the same ratio to the total amount to be refunded as the Donor's initial donation bears to the total amount of initial donations to the Trust Fund.

VI. POWERS OF TRUSTEE

In the administration of this Trust and of the Trust Fund, the Trustee shall have sole discretion and all powers and authority necessary or available to invest and reinvest the principal and income of the Trust in such property and in such manner as shall be prudent; subject, however, to the requirements (a) that the corpus of the Trust Fund be maintained at all times, except to the extent that it is diminished or extinguished by the payment provided for in Section V of this Agreement, and (b) that the Trustee maintain sufficient liquidity of the assets of the Trust Fund to permit such payment as it is required to be made.

VII. RESIGNATION OR REMOVAL OF TRUSTEE

The Trustee may resign upon furnishing sixty (60) days' written notice to Donors. The Trustee may be removed, with or without cause, by a vote of the Donors representing at least two-thirds of the funds contributed to this Trust Fund. In the event the Trustee resigns or is removed as Trustee hereunder, (1) the Donors shall appoint a replacement trustee, and (2) the Trustee shall transfer all funds then remaining in the Trust Fund to the replacement trustee within five (5) business days of the appointment of the replacement trustee.

VIII. DENIAL OF LIABILITY

By entering into this One River Road (Edgewater, N.J.) Site Trust Fund Agreement, the Donors do not admit, and the execution of this Trust Fund Agreement or the provision of funds by the Donors does not constitute and shall not be construed as an admission of any of the findings made by EPA with regard to the site or of any liability for such conditions as EPA may allege to exist at the site, nor as a waiver of any claim or defense. Neither the execution of this Trust Fund Agreement nor the provision of funds to the Trust Fund shall collaterally estop any Donor from contesting any fact or contesting liability for conditions at the site in any proceeding commenced by any person.

IX. RELIANCE BY THIRD PERSONS

Any third person may rely on a copy, certified by a notary public, of an executed original of this Trust Agreement held by the Trustee, and of any of the notations on it and writings attached to it, as fully as he might rely on the original documents themselves. Any such person may rely fully on any statements of fact certified by anyone who appears from such original documents or from such certified copy to be the Trustee under this Trust Agreement. No third person dealing with the Trustee need inquire concerning the validity of anything the Trustee purports to do. No third person dealing with the Trustee need see to the application of anything paid or transferred to or upon the order of the Trustee of the Trust. Nothing contained herein shall preclude a Donor from obtaining from the Trustee relevant information concerning the performance of his duties, including any statements of fact certified by the Trustee, the validity of anything the Trustee purports to do, or the application of anything paid or transferred to or upon the order of the Trustee.

X. TERMINATION

This Trust shall terminate thirty (30) days after payment to Allied as provided in Paragraph V(A). Upon termination of this Trust, the Trustee shall pay to its own account any amount due it as compensation pursuant to Paragraph IV(B), shall render an accounting to each Donor of the financial condition of the Trust Fund, shall proceed to conclude the affairs of the Trust and shall distribute the remaining assets of the Trust Fund, if any, to the Donors' escrow agent for distribution in accordance with the formula set out in Paragraph V(B). Trustee shall have no duty to prorate any funds distributed to Donors through their escrow agent or to file any tax returns with respect to such funds. Upon final distribution as aforesaid, the powers, duties and authority of the Trustee hereunder shall cease. However, the provisions of Paragraphs IV(C) & VIII of this Trust Agreement are intended to, and shall, survive the termination of the Trust.

XI. SEVERABILITY

If any section of this Agreement, or portion thereof, shall be adjudged illegal, invalid or unenforceable, such illegality, invalidity, or unenforceability shall not affect the legality, validity or enforceability of this Agreement, as a whole, or of any other section, or portion thereof, not so adjudged.

XII. AMENDMENTS

This Trust Agreement may not be amended orally but may be amended at any time or times by written instrument or instruments signed by the Trustee and by Donors representing at least two-thirds of the funds contributed to this Trust Fund, except that the provisions of Paragraphs I, II, and VIII shall not be amended except upon unanimous consent of all Donors.

All instruments amending this Trust Agreement will be noted upon or kept attached to the executed original of this Trust Agreement held by the Trustee.

XIII. COVENANT

The provisions hereof shall be binding upon the undersigned, their successors and assigns in interest and all persons, firms, subsidiaries and corporations acting for or on behalf of the parties named herein.

XIV. COUNTERPARTS

This Agreement has been executed for the convenience of the parties hereto in counterparts signed by each of the parties, any one of which for all purposes shall be deemed to have the status of an executed original.

IN WITNESS WHEREOF the Donors and the Trustee, respectively, have caused this instrument to be signed by persons duly authorized to sign on behalf of each particular party.

EXHIBIT 2

The Trustee shall receive as compensation all interest and income earned by the Trust during the period the Trust is in existence.

One River Road (Edgewater, N.J.)

Trust Fund Agreement
Authorization Form

Name of Donor/PRP Participant: ______________________

Signature of Donor representative: ______________________

Title: ______________________

Date: ______________________

Acceptance By the Riggs National Bank of Washington, D.C., Trustee

By: ______________________

Title: ______________________

Date: ______________________

QUANTA

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
Region II
26 Federal Plaza
New York, New York 10278

IN THE MATTER OF	:	
ONE RIVER ROAD, EDGEWATER, NEW JERSEY:	:	
	:	
ALLIED CORPORATION,		ORDER ON CONSENT
	:	
Respondent.		Index No. II-CERCLA-50108
	:	
Proceeding Pursuant to §106 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §9606	: :	

JURISDICTION

This Administrative Order on Consent (Order) is issued by the United States Environmental Protection Agency (EPA) pursuant to the authority vested in the President of the United States by §106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. §9606(a), which authority was delegated to the Administrator of EPA by Executive Order 12316, 46 Fed. Reg. 42237 (August 20, 1981), and duly redelegated to the Regional Administrator, EPA Region II on March 17, 1983. Pursuant to that authority, EPA hereby makes the following Findings and Determination and issues the following Order on Consent. Pursuant to Section 106(a) of CERCLA, the State of New Jersey Department of Environmental Protection (NJDEP) has been notified of this Order.

The above-captioned respondent (hereinafter, "Respondent") has consented to the issuance of this Order without any adjudication of fact or law. Respondent's consent to this Order and the subsequent compliance by Respondent with the terms of this Order does not constitute, and shall not be construed as, an admission of liability of any kind, a waiver of any defense which may be available to Respondent in this or any other proceeding, or an admission by Respondent of any fact or conclusion of law (or of the applicability or inapplicability of any law).

EPA FINDINGS OF FACT AND LAW

EPA has made the following findings of fact and law:

1. Respondent is a person, as defined in §101(21) of CERCLA, 42 U.S.C. §9601(21), and is a former owner and operator of the facility which is the subject of this Order and a potentially responsible party under Sections 107(a)(1) and (a)(2) of CERCLA, 42 U.S.C. §§9607(a)(1) and (a)(2).

2. The hazardous substances referred to in this Order shall mean any substances meeting the definition of "Hazardous Substance" as defined in §101(14) of CERCLA, 42 U.S.C. §9601(14).

3. The facility which is the subject matter of this Order (hereinafter, "the facility" or "the site"), which has come to be known variously as the "Quanta Resources" facility, the "Edgewater Terminal", and the "One River Road Facility", is located at One River Road, Edgewater, New Jersey. The property, located in the Borough of Edgewater, County of Bergen, comprises Block 95, Lots 1, 2, and 3, on the Tax Map of the Borough of Edgewater. The Hudson River forms the eastern boundary of the property, which lies at a point approximately parallel to West 93rd Street, Manhattan. It is further bordered by the Celotex Industrial Park property on the north, an industrial facility on the south, and a railroad right of way and River Road, a primary commercial thoroughfare, to the west.

4. The site is adjacent to commercial facilities which process or are otherwise engaged in the handling of food intended for human consumption. River Road carries a continual stream of both commercial and non-commercial vehicular traffic. A portion of the New Jersey Palisades, which rises 300 yards to the west of the property, contains residential housing, including several high-rise condominium residences. The segment of the Hudson River bordering the facility to the east carries both commercial and pleasure traffic throughout the year.

5. If certain of the hazardous substances stored at the site were to be released to the environment, under certain conditions (e.g., fire), winds traveling west over the property (in a direction opposite to the direction of prevailing winds at the site) could carry airborne emissions of hazardous substances from the property into the surrounding area. Winds traveling east over the property could carry airborne emissions off the site.

6. Beginning at some time in the 1930s, the Barrett Division of Allied Chemical Corporation (now Respondent ALLIED CORPORATION) commenced operations at the site.

7. ALLIED CORPORATION (ALLIED) conducted coal tar processing operations at the facility for several decades thereafter. In or about March 1974, James Frola (Frola) and Albert Von Dohln (Von Dohln) purchased the facility from ALLIED.

8. In or about May 1977, Frola and Von Dohln leased the facility to E. R. P. Corporation (ERP). The lease specified that the property was to be utilized for the storage of oil and recycling of oil. At a time after May 1977, ERP assigned its lease to Edgewater Terminals, Inc., which, on or about July 29, 1980 re-assigned the lease to Quanta Resources Corporation (QRC). QRC was a wholly owned subsidiary of Quanta Holding Corp., which, in turn, was a wholly owned subsidiary of Waste Recovery, Inc. Waste Recovery, Inc. was a wholly owned subsidiary of A. G. Becker Paribas, Incorporated (formerly Warburg-Paribas-Becker, Inc.).

9. On or about August 6, 1980 QRC entered into an administrative consent order with the New Jersey Department of Environmental Protection (NJDEP). The consent order required QRC to perform environmental cleanup activities at the site and to operate thereafter only in conformance with enumerated State laws and regulations. Specifically, the activities which could be legally conducted at the site, and types of wastes which could be legally accepted by the operation at the facility, was limited to storage, reprocessing, reclamation, and recovery of special wastes consisting of waste oil, oil emulsions, and oil sludges. Acceptance of PCBs was completely prohibited. The August 6, 1980 NJDEP order was superseded by another NJDEP consent order with QRC dated May 29, 1981 and a Temporary Operating Authorization (TOA) also dated May 29, 1981.

10. Hudson Oil Refining Corporation, Newtown Oil, Polar Industries, Inc., Casco Equipment Corporation, and Oil Transfer Corporation offered to the public waste collection, transportation, and disposal services utilizing the tank capacity existing at the site.

11. Analyses of samples taken from tanks at the facility on or about June 23, 1981 indicated the presence of PCBs in the liquids in those tanks at concentrations exceeding 50 parts per million. Storage of PCBs constituted a violation of the TOA.

12. At the direction of NJDEP, operations at the facility ceased on July 2, 1981. NJDEP issued a formal order of cessation of operations on October 12, 1981. Six days earlier, on October 6, 1981, QRC filed for reorganization pursuant to Chapter 11 of the Bankruptcy Code, 11 U.S.C. §101 et seq. On November 12, 1981 the Chapter 11 Petition was converted into a Chapter 7 liquidation.

13. The facility contains 61 (SIXTY-ONE) above-ground storage tanks with a storage capacity of approximately 9 million gallons, in addition to approximately 10 underground storage tanks with a capacity of roughly 40,000 gallons. It covers an area of about 15 acres, with a perimeter of approximately 22,000 linear feet. Large quantities of chemically contaminated waste oil, oil sludges, tar, asphalt, process water, and as yet uncharacterized liquid chemicals have been abandoned in tanks at the site. In addition to the bulk liquids stored at the site, about 50 drums containing oils, sludges, contaminated absorbent materials, debris, and uncharacterized materials are staged at primarily three locations within the facility.

14. As a result of the long period of active operations at the site , soils at the site have become contaminated with asphaltic materials and with oils containing hazardous substances and chemicals, some of which may have been released from their containments during spills which occurred at the facility after its cessation of operations.

15. Large deposits of tar and asphalt have been identified in the soils of that part of the facility nearest the Hudson River, and the surface of the shallow portion of the Hudson River which borders on the facility is continually covered with a thick layer of weathered oily sludge attributable, at least in part, to discharges and releases from the facility.

16. Some of the substances presently being released and/or posing a threat of release from the facility to the environment have been delivered to the facility, were abandoned at the facility, or may have been generated, by Respondent or as a result of Respondent's ownership or operation of the facility.

17. As of March 29, 1985, there existed at least 750,000 gallons of chemically contaminated oil within the tanks at the facility. Oil in many of the facility's tanks has been identified as contaminated with PCBs in concentrations from 50 to 260 ppm. Approximately 266,000 gallons of oil have been found to be contaminated with PCBs near or above the level of 50 ppm.

18. As of March 29, 1985, a number of tanks at the facility contained hydrocarbons with flash points of approximately 140° F., and one tank contained 50,000 gallons of liquid hydrocarbon with a flash point of 125° F. Internal tank temperatures during summer weather can be expected to reach or exceed the flash point of the liquids in these tanks.

19. Volatile hydrocarbons including benzene, toluene, trichloroethane, ethyl benzene, and phenol have been identified in samples of oil taken at the facility.

20. As of March 29, 1985, approximately 4.2 million gallons of chemically contaminated aqueous liquids had been found to be abandoned at the facility. Analyses of portions of these wastes have indicated Chemical Oxygen Demand (COD) and Total Organic Carbon (TOC) concentrations as high as 150,000 ppm and 54,000 ppm, respectively. Levels of cyanide as high as 10 ppm and of lead as high as 59 ppm have been identified upon analysis of the water phase of the contents of tanks at the facility, in addition to chloroform and anthracene.

21. The chemical contaminants referenced in Paragraph 20, supra, including but not limited to benzene, cyanide, toluene, phenol, and PCBs, are considered to have high toxicity.

22. As of March 29, 1985, significant amounts of contaminated sludges had been abandoned at the facility. It was estimated that on that date, the site stored approximately 500,000 gallons of such contaminated sludges.

23. EPA has conducted limited air monitoring at the site. Organic Vapor Analyzer (OVA) readings of over 400 ppm have been obtained while measuring vapors released from liquids being pumped from storage tanks during December 1982. Positive tests for benzene and phenol in air have been obtained using Draeger tubes and Lomotte Sampling Kits.

24. Among the hazardous substances listed above, PCBs, benzene, cyanide and lead, inter alia, have been determined by EPA to cause adverse human health effects.

25. Certain hazardous substances found at the site, if released to the environment in a manner providing vectors of exposure to the general public, could be responsible for adverse human health effects from ingestion, inhalation, or direct contact.

26. Wastes detected in analyses of samples taken from tanks at the facility indicate a potential fire hazard due to the low flashpoint of the constituents of those wastes.

27. A fire at the facility involving some of the substances listed in paragraph 21, supra, could result in creation of toxic by-products including, but not limited to, chlorinated dibenzofurans and dioxins from the burning of PCBs. One such chlorinated dioxin is tetrachlorodibenzodioxin, one of the most acutely toxic substances known.

28. A federal Centers for Disease Control (CDC) representative visited tne facility on March 15, 1985 and determined that the facility constitutes a significant hazard and threat to public health. The CDC has recommended immediate removal from the facility of those highly toxic materials found at the site.

29. A release of hazardous substances from the property traveling west could reach River Road. A release of hazardous substances from the property traveling east could enter the Hudson River. A sudden spill (e.g., from transfer equipment failure or from failure of deteriorating containment structures) could travel west from the site toward River Road and an active industrial railroad spur. In the event of a spill reaching River Road, vehicular traffic, if not diverted, could spread contamination from the site over additional portions of River Road or other public thoroughfares in the Edgewater area. A spill from the site traveling east could travel directly to the Hudson River either through underground piping and drain systems on the site or through storm drain lines located on the property immediately to the south of the site.

30. The present owners of the facility, James Frola and Albert Von Dohln, hired a contractor in the fall of 1982. From that time until the summer of 1983, the contractor attended to small spills at the facility, maintained a containment boom along the eastern property boundary with the Hudson River, dismantled sections of transfer piping, installed emergency clay diking, constructed an overland discharge line from the facility oil-water separator to the Hudson River, and arranged for the disposal of 200,000 gallons of contaminated aqueous solution from a leaking tank. 776,000 gallons of oil were removed from the facility and sold during that time. No major cleanup or stabilization of the site was achieved, however, and no steps were taken to eliminate the occurrence of releases and the threat of releases from the facility to the environment or to abate the existence of a threat posed by the facility to the public health, welfare, or the environment.

31. In November 1983 the property owners entered into an administrative consent order with NJDEP. That order detailed steps required for a cleanup of the site. The requirements of that order were not satisfied, and the property owners remain in violation of that order.

32. In or about July 1984, EPA commenced an action pursuant to 40 C.F.R. Part 112 against certain alleged owners and operators of the site for failure of the facility to have prepared, maintained, and implemented a Spill Prevention Control and Countermeasure (SPCC) Plan. The deficiencies noted in that administrative action were not corrected, and that action, including the matter of a proposed penalty of $200,000, remains unresolved.

33. During the period September 1984 until March 1985, EPA, the owners of the facility, and representatives of some of the potentially responsible parties at the facility attempted to negotiate a plan to initiate cleanup of the facility. The interests with whom EPA was negotiating failed to come forward with such a plan.

34. EPA has determined that the release of material containing hazardous substances from the facility into the environment constitutes a release of hazardous substances from a facility to the environment.

35. Hazardous substances, pollutants, and contaminants threaten to continue to be released from the facility into the environment absent the taking of appropriate actions at the facility.

36. The continued releases and threatened releases of hazardous substances, pollutants, and contaminants from the facility to the environment presents an imminent and substantial endangerment to the public health, welfare and the environment. EPA believes that corrective actions, as contemplated by §§300.65 and 300.67 of the NCP, are appropriate at the facility to prevent and/or mitigate immediate and significant risk of harm to human health and/or the environment.

The foregoing FINDINGS have been made by EPA. By consenting to this Order, or by taking any actions under this Order, Respondent does not concede the correctness of these FINDINGS. This Order, and compliance with the terms hereof by Respondent, does not constitute, and shall not be construed in any way, as an admission of any fact or conclusion of law (or of the applicability or inapplicability of any law) or an admission of liability on the part of Respondent or as a waiver of any defense by Respondent. Respondent contests the FINDINGS and reserves the right to challenge them in this or in any other proceeding in which they may arise. However, Respondent specifically agrees not to contest the authority or the jurisdiction of the Regional Administrator, EPA Region II, to issue this Order, and also agrees not to contest the terms of this Order in any action to enforce its provisions. It is further the intention of the parties hereto that neither the terms of this Order, including the FINDINGS made herein, nor the act of performance hereunder, shall be used against Respondent as a collateral estoppel in any other case with EPA, with any other governmental agency, or with any other person.

DETERMINATION

Based upon the FINDINGS set forth above and the entire administrative record, EPA has determined that the release and threat of release of hazardous substances to the environment from the facility may present an imminent and substantial endangerment to the public health, welfare, and the environment within the meaning of §106(a) of CERCLA, 42 U.S.C. §9606(a).

ORDER

Based upon the foregoing FINDINGS and DETERMINATION, IT IS HEREBY ORDERED that certain actions be taken to abate the release and threat of release of hazardous substances, pollutants, and contaminants at and from the facility into the environment. A Removal Program, as set forth in greater detail in Attachment A hereto, must be implemented at the facility. The Work Plan resulting from Attachment A shall be deemed incorporated herein and made a part hereof.

IT IS FURTHER ORDERED:

1. Not later than the effective date of this Order, Respondent shall select a coordinator, to be known as the Designated Coordinator, and shall submit the name, address, and telephone number of the Designated Coordinator to the EPA On-Scene Coordinator (OSC). As of the effective date of this Order, the name, address and telephone number of the EPA Region II On-Scene Coordinator is: Mr. John Witkowski, On-Scene Coordinator, Response and Prevention Branch, EPA Region II, Edison, New Jersey 08817, 201-321-6739. In the event the OSC is changed, EPA will promptly inform Respondent.

2. Respondent shall implement the Removal Program set forth in Attachment A hereto pursuant to the schedule contained therein. Performance of the Removal Program shall be complete not later than 28 (TWENTY-EIGHT) months from the effective date of this Order.

3. As appropriate during the course of implementation of the Removal Program at the facility, Respondent or its consultants or contractors, acting through the Designated Coordinator, may confer with the OSC concerning the Removal Program. Based upon new circumstances or new information not in the possession of EPA on the date of this Order, the Designated Coordinator may request in writing approval of a modification of the Removal Program as incorporated in Attachment A hereto from the Director, Emergency and Remedial Response Division.

Respondent shall provide written notification to EPA of any circumstances which have caused, or which Respondent believes are likely to cause, a delay of performance. Such written notice, which shall be provided as soon as possible after occurrence of the delay or discovery of circumstances which Respondent believes are likely to cause a delay, but in no event later than 10 (TEN) days after the date when Respondent knew of the occurrence of such circumstances, shall be accompanied by such documentation as may be specified by the OSC, including, if required by the OSC, a plan of action taken, or to be taken, by Respondent to minimize any delay and a projection of the date(s) on which delayed activities will be completed.

If approved by the Director, Emergency and Remedial Response Division, such modification shall be implemented immediately by Respondent and shall also be deemed a modification of this Order.

4. In the event of an inability or anticipated inability of Respondent to perform any of the activities required by the Removal Program, the Designated Coordinator shall immediately inform the OSC of the reason for, and date and length of, any anticipated inability to perform, and the actions taken or to be taken by Respondent to avoid or mitigate the impact of such inability to perform, including the proposed schedule for such actions.

5. In the event of a significant change in conditions at the facility, the Designated Coordinator shall notify the OSC immediately at the following emergency telephone numbers: 201-548-8730 or 201-321-6670. Until the OSC provides direction, Respondent may, at its discretion, take reasonable measures under the circumstances. Respondent shall remain liable for any adverse consequences of such measures. In the event the Director, Emergency and Remedial Response Division determines that the activities under the Removal Program, or significant changes in conditions at the facility, pose a substantial threat of immediate and significant risk of harm to human life or health or the environment, EPA may order Respondent to stop further implementation of the Removal Program or to take other and further actions reasonably necessary to abate the emergency. This provision is not by way of limitation to any rights EPA may have under §§300.65 or 300.67 of the NCP or any other applicable provision of the NCP, or under any other applicable law or regulation.

6. EPA acknowledges that the work specified by and set forth in Attachment A is consistent with the National Contingency Plan, and agrees to certify the work, if properly performed, as having been performed consistently with the NCP.

All actions and activities carried out by Respondent pursuant to this Order shall be done in accordance with all applicable federal, State, and local laws, regulations and requirements and with applicable provisions of the NCP.

7. Failure of the Respondent to expeditiously and completely carry out the terms of this Order may result in EPA taking the required actions unilaterally, pursuant to §104(a)(1) of CERCLA, 42 U.S.C. §9604(a)(1).

8. Respondent's Designated Coordinator shall provide written weekly progress reports to EPA with respect to all actions and activities undertaken pursuant to this Order. All submittals, deliverables, and notifications to EPA pursuant to this Order shall be made to the OSC and, in triplicate, to the Chief, Site Investigation and Complianmce Branch, Emergency and Remedial Response Division, ATTN: Quanta Project Coordinator, unless otherwise provided herein.

9. Respondent shall assure that with respect to any premises, other than the facility, which Respondent or its contractors or consultants may use in connection with implementation of this Order, unimpeded access to such premises shall be provided to EPA and to EPA's duly authorized employees, contractors, and consultants.

Any contract between Respondent and a third party for removal and/or disposal of waste from the facility or for performance of laboratory analytical work shall provide for unimpeded EPA access to either a waste storage or disposal site used in connection with such removal and/or disposal of wastes from the site or an analytical laboratory used to perform work in connection with implementation of the Removal Program.

10. Employees of EPA shall have full access to all technical records and contractual documents maintained or created by Respondent or its contractors in connection with implementation of the Removal Program.

11. With respect to all chemical analyses and all disposal operations conducted in compliance with this Order, Respondent shall provide the OSC with the identity of and, if applicable, licensing identification numbers of (e.g., with respect to waste haulers or disposal facilities) all persons or entities performing such work within 2 (TWO) working days of selection of such persons, companies, or facilities, for purposes of establishing that all such activities have been performed in accordance with EPA approved methodology and that all wastes ultimately disposed are disposed at properly licensed and EPA-approved hazardous waste disposal facilities. However, Respondent may burn as fuel or recycle as product any removed waste, provided that such burning or recycling is performed in compliance with all applicable federal, state and local statutes and regulations and EPA Off-Site Disposal Policy then in effect.

12. All removal work performed pursuant to this Order shall be performed under the direction and supervision of one or more registered or otherwise appropriately licensed professional engineers, geologists, or hydrologists, if appropriate to the task being performed.

13. All chemical analyses shall conform to EPA Quality Assurance/Quality Control procedures and in conformance with Section 10 and 1.3, respectively, of the EPA publication entitled "Test Methods for Evaluating Solid Waste" (SW-846) and "Guidance for Preparation of Combined Work/Quality Assurance Project Plans for Water Monitoring."

14. Upon request by the OSC, Respondent and/or its contractors shall provide split samples of any material sampled in connection with implementation of the Removal Program.

15. The United States, by issuance of this Order, assumes no liability for any injuries or damages to persons or property resulting from acts or omissions by Respondent or Respondent's employees, agents, contractors, or consultants, in carrying out any action or activity pursuant to this Order, nor shall the United States be held as a party to any contract entered into by Respondent or by its officers, employees, agents, contractors, or consultants in carrying out any action or activity pursuant to this Order.

16. Nothing contained in this Order shall affect any right, claim, interest, defense, or cause of action of any party hereto with respect to third parties, which parties are not respondents to this Order, or with respect to any other persons whom EPA has notified are deemed potentially responsible parties in relation to the facility. EPA acknowledges Respondent's right of contribution and other remedies of Respondent against any responsible party not participating in this Order, except to the extent Respondent has affirmatively waived such right of contribution or access to remedies.

17. Respondent's activities under this Order shall be performed within the time limits set forth herein or in the Work Plan unless performance is delayed by events which constitute force majeure. For purposes of this Order, force majeure is defined as any event arising from causes beyond the control of Respondent. Financial considerations of Respondent and other persons mentioned in this paragraph shall not be considered circumstances beyond the control of Respondent. In the event of a force majeure, Respondent shall be obligated to perform the affected activities within an additional time period which shall not exceed the time period of the delay attributed to the force majeure, provided, however, that no deadline shall be extended beyond a period of time that is reasonably necessary.

Respondent shall orally notify the OSC as soon as possible following Respondent's awareness that circumstances constituting a _force majeure_ have occurred or are likely to occur. If the OSC cannot be contacted, Respondent, through the Designated Coordinator, shall attempt to leave a message at his or her office and shall immediately proceed to notify the EPA Quanta Project Coordinator by phone. In addition, Respondent shall notify the Director, Emergency and Remedial Response Division in writing, through the Designated Coordinator, as soon as possible, but not later than 5 (FIVE) days after Respondent becomes aware that circumstances constituting a _force majeure_ have occurred.

Such written notice shall be accompanied by all available pertinent documentation, including but not limited to third-party correspondence, and shall contain the following: 1) a description of the circumstances, and Respondent's rationale for interpreting such circumstances as being beyond its control; 2) the actions (including pertinent dates) that Respondent has taken and/or plans to take to minimize any delay; and 3) the date by which or the time period within which Respondent proposes to complete the delayed activities.

Respondent's failure to timely notify EPA as required by this Paragraph shall render the remaining provisions of this Paragraph null and void insofar as they may entitle Respondent to an extension of time.

18. Respondent shall use its best efforts to avoid or minimize any delay or prevention of performance of its obligations under this Order. Any delay situations which arise as a result of changed circumstances pursuant to Paragraph 3, _supra_, or conditions deemed by EPA to constitute _force majeure_, shall be treated as modifications of the Removal Program pursuant to Paragraph 3, _supra_.

19. Respondent agrees not to make any claims pursuant to §112 of CERCLA, 42 U.S.C. §9612, directly or indirectly, against the "Hazardous Substance Response Trust Fund" with respect to the costs of work performed under the terms of this Order.

20. Violation of this Order as a result of Respondent's failure to comply with any provision herein shall be enforceable pursuant to §§106(b) and 113(b) of CERCLA, 42 U.S.C. §§9606(b) and 9613(b). Respondent may also be subject to cost recovery by the United States, civil penalties and/or punitive damages as provided in §§106(b), 107(a), and 107(c)(3) of CERCLA, 42 U.S.C. §§9606(b), 9607(a), and 9607(c)(3), for failure to comply with the terms of this Order. Nothing herein

shall preclude EPA from taking such additional actions as may be necessary to prevent or abate an imminent and substantial danger to the public health, welfare or the environment arising from conditions at the facility and recovering the costs thereof, nor shall anything herein preclude NJDEP from taking legal action pursuant to State law.

21. Respondent's consent to and compliance with this Order does not constitute, and shall not be construed as, a waiver of any defenses which Respondent may wish to raise in other aspects of this proceeding or in any other proceeding. Nothing contained in this Order shall constitute or be construed as an admission by Respondent with respect to any factual or legal matter. Neither the terms of this Order, including the FINDINGS made herein, nor the act of performance hereunder by Respondent, shall be used against Respondent as a collateral estoppel in any other case with EPA, with any other governmental agency, or with any other person. However, Respondent specifically agrees not to contest the authority or the jurisdiction of the Regional Administrator, EPA Region II, to issue this Order, and also agrees not to contest the terms of this Order in any action to enforce its provisions.

22. Within 60 (SIXTY) days of Respondent's receipt of a documented demand from EPA for payment of costs incurred by the United States in connection with the facility after 12:01 a.m. June 15, 1985, and prior to 12:01 a.m. of the date on which Respondent commences performance of the Removal Program under this Order, Respondent, Respondent in conjunction with other potentially responsible parties at the facility, or other potentially responsible parties acting on behalf of and for the benefit of themselves and Respondent, shall forward a certified check in the amount of the demand, payable to the order of the "Hazardous Substances Response Trust Fund," to EPA-Superfund, Box 371003M, Pittsburgh, Pennsylvania 15251, together with a cover letter specifying the name and index number of the matter for which payment is being forwarded and what obligation the payment is intended to satisfy. A copy of the cover letter shall be sent to the EPA Project Coordinator, as set forth in Paragraph 8, supra. Such payment shall constitute a payment pursuant to §107 of CERCLA, 42 U.S.C. §9607, in reimbursement to the United States of costs incurred under CERCLA at and in connection with the facility.

23. Within 60 (SIXTY) days following Respondent's completion of the requirements of this Order, the Director, Emergency and Remedial Response Division, EPA Region II, shall issue a determination and, if appropriate, an acknowledgment that the requirements of this Order, including all requirements of Attachment A hereto, have been completed in compliance with the requirements of this order and in compliance with the NCP.

Upon issuance of such determination and acknowledgment, Respondent shall be deemed released by EPA from any further requirements or duty to perform under this Order for surficial response action at the site, and from any further obligation to perform actions or activities in furtherance of the attached Work Plan for performance of removal activities at or on the facility.

The provisions of this paragraph do not release Respondent from liability for the performance of acts or the payment of money which may arise as a result of conditions relating to surficial pollution or contamination or releases or threatened releases to the environment resulting therefrom, which conditions are unknown or undetected at the facility on the effective date of this Order, with respect to any surficial site condition posing an imminent and substantial endangerment to the public health, welfare or the environment which may occur or arise at the facility on or after the effective date of this Order, or where additional information unavailable on the effective date of this Order indicates that conditions at the facility, regardless of compliance with the terms of this Order, may pose an imminent and substantial endangerment to the public health, welfare or the environment.

Nothing in this Order shall be deemed to release, discharge, or otherwise relieve Respondent from the obligation to perform such further or additional response actions or activities at the facility (other than the activities performed in furtherance of the attached Work Plan), or such other response actions as may be required as a result of the generation, storage, handling, transportation, treatment, or disposal of hazardous substances, pollutants or contaminants resulting from the performance of the Removal Action pursuant to Attachment A, as may be deemed necessary pursuant to CERCLA or other applicable laws.

Nothing in this Order shall be deemed a release of Respondent with respect to surficial response actions at the site (including the removal of visibly contaminated soils) which may initially be required by EPA of potentially responsible parties other than Respondent.

Nothing in this Order shall be deemed a release of Respondent with respect to claims by the United States or any State for natural resources damages attributable to the ownership or operation of the facility or releases to the environment from the facility.

Except as otherwise provided in this paragraph or Paragraph 22, supra, nothing in this Order shall be deemed to release, discharge, or otherwise relieve Respondent from liability for the payment of money to EPA or to the United States pursuant to 42 U.S.C. §9607 or other federal laws for costs incurred by the EPA or the United States as a result of performance of, or involvement by the United States in, actions or activities taken in connection with the facility.

In the event that EPA pursues injunctive or monetary relief judicially with respect to response actions or costs incurred at or relating to the facility against potentially responsible parties other than Respondent, and such potentially responsible parties attempt to join or otherwise assert claims against Respondent, EPA will request the Department of Justice to support Respondent's efforts to persuade the court that it should take no action to defeat the purposes of this Consent Order and, if necessary, to argue to the court that in adjusting equities among responsible parties, positive consideration should be given to Respondent, who voluntarily agreed to undertake the work specified herein.

In the event that EPA pursues injunctive or monetary relief judicially with respect to the facility against potentially responsible parties other than Respondent, Respondent agrees that such claims, and the satisfaction of any judgments arising therefrom, shall be superior to any claims which are or which could be asserted by Respondent against any such potentially responsible parties.

24. Except as otherwise provided by law, nothing in this Order shall be construed to confer upon Respondent any right, title or interest to real or personal property.

25. This Order, and Respondent's obligation to perform the requirements of Attachment A hereto, shall become effective on the first business day of the first week following the week on which a trust in the amount of $5,000,000 (FIVE MILLION DOLLARS) created by potentially responsible parties other than Respondent, the corpus of which shall be payable to Respondent in consideration of work performed under this Order, shall be funded as provided for in the trust document denominated "ONE RIVER ROAD (EDGEWATER, N.J.) SITE TRUST FUND AGREEMENT," and in the document denominated "COVENANT NOT TO SUE," entered into, or to be entered into, between certain potentially responsible parties at the facility and EPA. EPA will notify Respondent of the date on which EPA is informed by the Trustee that the Trust has been funded in the required amount.

Respondent shall complete performance of the requirements of this Order and Attachment A hereto not later than 28 (TWENTY-EIGHT) months from the effective date of this Order.

All times for performance of actions or activities to be performed under this Order and Attachment A hereto shall be calculated from the effective date, as defined in this paragraph, except as elsewhere provided to the contrary.

Date of Issuance: September 30, 1985

By: Christopher J. Daggett
CHRISTOPHER J. DAGGETT
REGIONAL ADMINISTRATOR

ALLIED CORPORATION

By: Alan Belzer
(signature)

September 26, 1985
DATE

Alan Belzer
(printed name of signatory)

Executive Vice President and
President, Chemical Sector
(signatory's title or designation of
authority showing signatory to be
an officer of Respondent)

By: Edward W. Callahan
(signature)

September 26, 1985
DATE

Edward W. Callahan
(printed name of signatory)

Vice President-Health, Safety &
Environmental Science
(signatory's title or designation of
authority showing signatory to be
an officer of Respondent)

ATTACHMENT A

SCOPE OF WORK TO BE PERFORMED BY RESPONDENTS IN THE IMPLEMENTATION OF THE REMOVAL PROGRAM

The detailed scope of work to be performed by Respondent in implementing/performing the activities in this Consent Order under the Removal Program at the facility is as follows.

Development of Detailed Workplan

Within 15 days of the effective date of this Order, Respondent shall submit a detailed outline of a Work Plan to address the removal of the waste remaining at the site. The detailed outline of the Work Plan shall include, but not necessarily be limited to, the following:

a. a detailed time schedule for performance of the specific tasks set forth in this Order and in this Scope of Work, and a detailed description of how these tasks will be accomplished;

b. a description of all sampling locations and the number, types, and frequency of samples to be obtained at each sampling location;

c. an overall Site Operations Plan for performance of tasks specified in this Order, including identification (or provision for later advance identification) of contractors and subcontractors and specification of such contractors' and subcontractors' respective responsibilities;

d. a Health and Safety Plan;

e. a contingency plan for conducting site activities.

Until such time as the detailed Work Plan, including a Health and Safety Plan, is approved by EPA, Respondent shall follow EPA's Work Plan, as previously supplied to the PRPs' Steering Committee, and with EPA's Health and Safety Plan, which shall be supplied.

Removal of Physical Obstructions

Extraneous piping and associated hardware, if any, which pose a safety hazard to either personnel or equipment brought on site shall be dismantled and stored in an isolated portion of the site, or disposed of as appropriate to the nature of the material and the contaminants with which it has been in contact. Empty tanks will be decontaminated and removed, as necessary, to facilitate surface cleanup.

Boom Deployment/Oil Collection

The containment boom currently installed along the Hudson River shall be maintained as necessary to prevent discharge of oil to the Hudson River. The boom shall be maintained so as to contain waste oil escaping from the facility to the Hudson River in as narrow an area adjacent to the property as possible. Contained oils shall be removed during every tidal cycle and disposed of properly. A filter box or sorbent pads may be placed perpendicular to the bulkhead to absorb oil moving parallel to the bulkhead at the approach of low tide. The filter box shall be maintained, and/or the sorbent pads replaced, as necessary.

Repair and Upgrading of Spill Containment Walls/Berms

All containment walls/berms shall be inspected by qualified personnel for damage or deterioration. Defects which might affect the ability of these barriers to contain spills shall be corrected.

NJPDES Monitoring

Sampling shall be conducted in accordance with the existing NJPDES permit to characterize: 1) the discharge from the underground drainage line, and 2) discharge quality of the oil/water separator effluent.

Contaminants to be characterized for the facility NJPDES permit shall include the following characteristics specified by the State of New Jersey, including:

Phenols
TSS
COD
TOC
PCB
Barium
Oil and Grease
Chromium
Cyanide
GC/MS Scan

Ambient Monitoring

Sampling shall be conducted to characterize air quality in breathing spaces, so that the proper level of personnel protection may be determined and maintained.

Oil/Water Separator Maintenance

Improvements of the oil/water separator shall be made as necessary to insure compliance with the NJPDES Permit. The separator shall be maintained and the effluent pipeline inspected and repaired as necessary. Sampling and testing of the effluent shall be conducted as required by the permit.

Underground Pipeline

The underground drainage line which extends from the oil/water separator towards the Hudson River bulkhead shall be investigated and sealed with concrete, if needed, and its surface drainage ports shall be sealed if it is determined that off site areas would not be adversely effected by these actions. It may be necessary to bypass the line if off site areas are found to be adversely affected.

Underground Tanks

All underground tanks known to be present at the facility on the effective date of the Order shall be emptied of hazardous wastes, cleaned, and either removed or their inlet ports rendered inoperable to prevent them from being used. All other underground tanks at the facility shall be identified, emptied, cleaned, and either removed or their inlet ports rendered inoperable in the same manner.

Rail Siding Maintenance

The rail siding shall be maintained to permit the safe and orderly transfer of waste materials to railroad cars for off site disposal.

Covering of Tanks

The process of covering tanks with damaged roofs, which may have been begun on-site by EPA, shall be continued as deemed necessary. This action is intended to prevent precipitation from entering those tanks and becoming contaminated. Contaminated materials shall be removed as appropriate.

Waste Analysis

Waste analysis tests shall be performed on all liquid phases of all tanks, and on all sludge in all tanks, including the sludge contained in the large cut-off tank, prior to bulk removal. The following minimum analyses are prescribed:

Water	Oil
Oil and grease	PCB
Cyanides, Lead	Priority Pollutants
COD, TOC, pH	% Solids, Water, Ash
Priority Pollutants	Total Halogens (ppm)
	Flashpoint

Waste Disposal

Materials contained in bulk storage tanks shall be removed from those storage tanks. Any materials Respondent determines can not be utilized as a source of energy or recycled as product in accordance with all applicable federal, state, and local laws and regulations shall be removed from the site and disposed of at appropriate waste disposal facilities in accordance with the then applicable EPA Off-Site Removal Policy. Drummed material shall be properly disposed of or may be discharged in accordance with the facility's NJPDES permit.

All material removed from the facility as a hazardous waste shall be handled and manifested accordingly.

A. Aqueous Waste Disposal

Based on the results of chemical analyses performed to date and any subsequent analyses performed on aqueous wastes at the facility, such aqueous wastes shall be removed from all tanks and disposed of either on site in accordance with the facility's NJPDES permit or in an appropriately permitted off-site disposal facility.

B. Non-PCB Oil Disposal

If future analyses indicate that the fuel value of the oil containing less than 50 ppm of PCB's (non-PCB oil) is great enough (>8,000 BTU/lb) and the bottom solids plus water is low enough, the non-PCB oil not otherwise utilized in the waste disposal process shall be removed from the site, but may be used as a fuel source.

C. PCB Oil Disposal

There are approximately 266,000 gallons of PCB contaminated (>50 ppm) oil now stored at the facility. The available analyses indicate that the average PCB concentration is 101 ppm. The PCB-contaminated oil shall be transported to an apropriately permitted facility for either disposal, incineration, or burning in an appropriately permitted high-efficiency boiler. PCB oil removed from the facility for incineration or use as an energy source shall be burned within 30 (THIRTY) days of their arrival at the location of burning.

D. Non-PCB Sludge Disposal

Review of the tank inventory conducted in May 1985 indicates that there are approximately 5,800 tons of sludge present in the inventoried tanks on-site. Chemical analyses have not been performed on the sludge materials to date.

Sludges shall either be disposed of in an appropriately permitted disposal facility or used as an energy source. Sludges removed from the facility for use as an energy source shall be burned within 30 (THIRTY) days of their arrival at the location of burning unless such sludges are shipped to a facility owned by Respondent, in which case all requirements of the Resource Conservation and Recovery Act, as amended (RCRA), 42 U.S.C. §6901 et seq., applicable regulations promulgated thereunder, and other applicable federal, state and local laws and regulations shall be met.

E. PCB Sludge Disposal

The PCB-contaminated sludge shall be removed from the tanks and disposed of. PCB-contaminated sludge may be incinerated on site, as provided below. Respondent may employ other suitable methods of handling and disposing of such sludge so long as Respondent complies with all applicable federal, state and local laws and regulations.

F. Clean-up of Sludge-Containing Tanks

Sludge shall be removed from the large cut-off tank and disposed. The tank shall be cleaned and altered so rainwater will not accumulate and cause contaminated oil to enter the facility yard in the event the cut-off tank is used as a holding tank suring the removal operation.

G. On-Site Incineration

Waste may be incinerated on site provided appropriate permits have been obtained by Respondent in such a manner as to permit disposal of those materials intended to be incinerated within the time limits established in the approved detailed Work Plan.

H. Drum Removal

All drums, pails, or other small containers of wastes shall be staged prior to removal from the site. All such materials shall be held at the staging area for a minimum of 48 (FORTY-EIGHT) hours prior to removal of those wastes from the site. During that 48 hour period, EPA and New Jersey Department of Environmental Protection personnel may inspect the wastes and their containers and record by any method the labelling on those containers or other information which those agencies believe pertinent.

Site Security

Site security shall be maintained to prevent unauthorized entry to the site.

Records

The following records, at a minimum, shall be created and maintained by Respondent and provided to the OSC at any time upon his request:

a. days and times of operation of all activities under this Removal Program;

b. inspection and replacement and/or maintenance dates for deployed sorbent boom and/or filter box;

c. daily weather records;

d. daily quantity of aqueous solution removed, specification of tanks from which removed, and destination of all aqueous waste loads removed from the facility. Copies of all manifests with respect to hazardous wastes, and copies of all bills of lading, invoices, and gate receipts with respect to all materials removed from the facility, shall be maintained at the facility;

e. daily quantity of hydrocarbon removed, specification of tanks from which removed, and destination of all hydrocarbon waste loads removed from the facility. Copies of all manifests with respect to hazardous wastes, and copies of all bills of lading, invoices, and gate receipts with respect to all materials removed from the facility, shall be maintained at the facility;

f. daily readings for air quality determinations at the facility and location of taking of all such readings;

g. identification of all operational problems and their resolution;

h. drum disposal records, including specification of any bulking performed, disposal date and disposal location.

Submittal of the detailed outline of the Work Plan to EPA shall be accomplished in the same manner as is provided for submittal of deliverables in Paragraph 8 of the Order.

EPA will review and comment on the detailed outline of the Work Plan. EPA will address its comments to the reasonableness of the time period set forth for completion of the removal activities enumerated in the detailed outline of the Work Plan and to conformance of the detailed outline of the Work Plan with sound management, engineering, and scientific practices, technological feasibility, established environmental monitoring procedures, and utilization of environmentally sound and acceptable waste disposal practices.

SCP

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

IN THE MATTER OF INMAR ASSOCIATES, INC. Respondent, Proceeding Under Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. §9606(a))	ADMINISTRATIVE ORDER Index No. II CERCLA-50115

JURISDICTION

This Order is issued to Inmar Associates, Inc. ("Respondent") by the United States Environmental Protection Agency (EPA) pursuant to the authority vested in the President of the United States by §106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. §9606(a), which authority was delegated to the Administrator of EPA by Executive Order 12316, 46 Fed. Reg. 42237 (August 20, 1981), and duly redelegated to the Regional Administrator, EPA Region II on March 17, 1983. Pursuant to Section 106(a) of CERCLA, the State of New Jersey Department of Environmental Protection (NJDEP) has been notified of this Order.

FINDINGS

1. Respondent is a person, as defined in §101(21) of CERCLA, 42 U.S.C §9601(21), and the owner of the facility which is the subject of this Order, and thus a responsible party under Section 107(a) of CERCLA, 42 U.S.C. §9607(a).

2. The hazardous substances referred to in this Order shall mean any substances meeting the definition of "Hazardous Substance" as defined in §101(14) of CERCLA, 42 U.S.C. §9601(14).

3. Respondent is a corporation, organized under the laws of the State of New Jersey and doing business in the State of New Jersey, which owns a parcel of property in Carlstadt, Bergen County, New Jersey. The property ("the Inmar Property") is bordered on the north by Peach Island Creek, a surface water of

the United States, on the south by Paterson Plank Road, on the west by Gotham Parkway, and on the east by Carolina Trucking Company. The property consists of Block 124, Lots 1 through 5, Township of Carlstadt (See Figure 1, attached).

4. During the period commencing in or about 1970 and continuing until in or about 1980, the Inmar property was leased by Scientific Chemical Processing, Inc., which operated on the property a waste collection, transportation, treatment and disposal service. The property leased by Respondent to Scientific Chemical Processing, Inc. constitutes a "Facility," as that term is defined in §101(9) of CERCLA, 42 U.S.C. §9601(9). The property to which this Order pertains shall hereinafter be referred to as "the site" or "the facility."

5. During the period of its operation, Scientific Chemical Processing, Inc. accepted and transported for transfer, storage, reprocessing, reclamation, blending, treatment, and for ultimate disposal, through abandonment at the site, materials including, but not limited to, materials contaminated by polychlorinated biphenyls (PCBs), oil and oil sludges, emulsions, acids, mixed solvents, and paint and pigment residues, most of which contained hazardous substances.

6. Respondent owned the facility at which these hazardous substances were accepted for transfer, storage, reprocessing, reclamation, blending, treatment and/or disposal.

7. Inspections performed at the site by the NJDEP and EPA between 1977 and 1984, sampling and chemical analyses, and environmental surveys conducted at the site have indicated that the material which has been released, or threatens to be released, into the environment from spills and/or leaking containers at the site, contained hazardous substances, and that surface water, groundwater, air and soil at the site have been or threaten to be contaminated.

8. Specifically, a NJDEP site inspection report dated October 10, 1980 indicates that based on a June 1980 inventory of waste at the site, the following wastes and/or constituents of waste were released or threatened to be released from the site: benzene, chloroform, trichloroethylene, toluene, styrene, xylene, arsenic, mixed solvents, paint sludge and solvent sludge.

9. Based on the aforementioned inspections, sampling and chemical analyses, and environmental surveys, the New Jersey Supreme Court ordered in October 1980 that Scientific Chemical Processing, Inc. cease operations due to uncontrolled spills and leaks at the site.

10. At that time, there were approximately 56 tanks and/or tank trailers and 50 drums containing hazardous substances at the site. The structural integrity of the tanks and tank trailers was highly questionable. Many were severely discolored, indica-

ting leaks, and some of the tanks had makeshift patches.

11. According to an Inventory prepared by Scientific Chemical Processing, Inc., in December 1980, various wastes containing hazardous substances still remained at the site, including, but not limited to, solvents and thinners, etching solutions, methanol/phosphoric acid solutions, sodium sulfate solutions, and fuel residues.

12. On May 5, 1983, a Verified Complaint and Order to Show Cause was filed by the NJDEP with Judge Reginald Stanton, Superior Court of New Jersey, the Chancery Division for Essex County, seeking the clean-up of the site. In the complaint, the Respondent was named as a defendant. On May 27, 1983 Judge Stanton made a finding that Respondent, as owner of the site, had an inherent obligation to keep the property safe and, consequently, was responsible, inter alios, for the clean-up of the site. On June 16, 1983, the Court ordered that a plan for the clean-up of the site be submitted by July 1, 1983.

13. During 1984, Respondent, under NJDEP supervision, removed from the site approximately 51 tanks and tank trailers, and approximately 50 drums, all containing hazardous substances. However, Respondent has failed to complete the clean-up work pursuant to the approved plan and the aforementioned Court Order (Docket No. C-1852-83E).

14. Presently, there are 4 tanks and 1 tank trailer remaining at the site. Lab analyses performed for Respondent indicate that the liquids, solids, and/or sludges in these tanks/tank trailer contain PCBs; these analyses showed PCB concentrations ranging as high as 91,000 parts per million (ppm) in one sample of sludge. One of the tanks shows evidence of leakage, and another tank has a half-inch wide section cut from its circumference at a height of approximately four feet above the ground. The lids on both of these tanks currently are open to the environment, enabling rainwater to come into contact with the PCB-containing liquids, solids, and/or sludges. There is an inadequate containment system in place around the tanks.

15. PCBs are regulated under the Toxic Substances Control Act (TSCA), 15 U.S.C. §2601 et. seq. Respondent, a "person" within the meaning of 40 CFR §761.3, owns a facility where PCBs (as that term is defined at 40 CFR §761.3) are stored, and is subject to the PCB regulations, 40 CFR Part 761, which were promulgated pursuant to Section 6(e) of TSCA. Pursuant to 40 CFR §761.65(a) any PCB article or PCB container stored for disposal before January 1, 1983 is required to be removed from storage and disposed of pursuant to 40 CFR Part 761 by January 1, 1984. The tanks and trailer mentioned in paragraph 14, above, are "PCB Containers" as defined by 40 CFR §761.3. The PCBs contained in the tanks and trailer were stored for disposal before January 1, 1983. Therefore, the storage of PCBs in the tanks and trailer

constitutes a failure or refusal to comply with 40 CFR §761.65(a), which is a violation of Section 15(1)(C) of TSCA.

16. PCBs have been demonstrated to cause cancer in animals and are suspected human carcinogens. PCBs can cause liver damage, and dermatological abnormalities such as chloracne and hyperpigmentation. PCBs bioaccumulate, i.e., are retained in human and animal tissues at concentrations in excess of exposure levels. PCBs are extremely stable and persistent in the environment.

17. Analyses of waste samples during 1979 showed the following hazardous substances to be present at the site: benzene, carbon tetrachloride, chloroethane, chloroform, ethylbenzene, ethylacetate, isopropanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, phenolic resin, styrene, tetrachloroethane, tetrachloroethylene, toluene, trichloroethane, trichloroethylene, and xylene.

18. The substances listed in paragraph 8, 11, and 17, above, have been shown to cause a variety of adverse effects to exposed populations. For example, benzene exposure has been closely linked to leukemia in humans, and may also be mutagenic. Carbon tetrachloride, chloroform and tetrachloroethylene cause cancer in animals, are suspected human carcinogens, and can cause liver and kidney damage. Ethylbenzene and xylenes can adversely effect the central nervous system, causing dizziness, unconsciousness, and death due to respiratory failure.

19. The presence of such hazardous substances at the site, and their past and/or potential future migration to surrounding soils, surface water, and groundwater, constitute an actual release or threatened release within the meaning of Section 101(22) of CERCLA, 42 U.S.C. §6901(22).

20. Based on present information, the site is located on a filled-in section of the Hackensack Meadows. The fill, which consists of organic silt, is underlain by clay deposits interspersed with beds of sand and gravel. These clay deposits, and sand and gravel beds are believed to be discontinuous and may not comprise a major confining unit. The bedrock at the site is the Brunswick Formation, which underlies the clay, sand and gravel deposits at depths ranging from approximately 40 to 120 feet in the vicinity of the site.

21. The two major aquifers in the area of the site are the Brunswick Formation and the Quarternary age stratified drift located along river channels. The Brunswick Formation yields water from fractures in the rock. Fracturing decreases with depth, and most of the groundwater is produced by the upper, highly fractured part of the formation.

22. There are approximately 21,000 people living within three miles of the site. The primary water supply for this population is groundwater. The nearest well is located about 4000 feet from the site.

23. The hydrogeologic conditions described in paragraphs 20 and 21 constitute conditions which may enhance the vertical transmission of hazardous substances in the groundwater. Groundwater contamination may pose a threat to local populations who utilize this water for drinking purposes.

24. Peach Island Creek borders the site on the north. This creek has been designated as Freshwater-2 (FW-2) by NJDEP. FW-2 criteria state that such waters should "be suitable for maintenance, migration, and propagation of the natural ecosystem and support biota." Peach Island Creek joins Berrys Creek Canal approximately 1500 feet northwest of the site. Berrys Creek Canal joins the Hackensack River approximately 2 miles downstream of its confluence with Peach Island Creek. According to NJDEP, designated uses for Berrys Creek and the Hackensack River include "secondary contact recreation; the maintenance and migration of fish populations; the migration of diadromous fish; the maintenance of wildlife and other reasonable uses." The Hackensack River enters the Atlantic Ocean in the Newark Bay approximately 7 miles south of the site. Contamination of Peach Island Creek would pose a threat of contamination to these other navigable waters.

25. Visual observations of spills into Peach Island Creek noted during past site inspections indicate possible contamination of surface water, creek sediment, soil and groundwater.

26. The site is on the National Priorities List ("NPL"), 40 CFR Part 300, Appendix B, which has been issued pursuant to Section 105(8)(b) of CERCLA, 42 U.S.C. §9605(8)(b).

27. On September 23, 1985, Respondent's attorney met with EPA representatives to discuss Respondent undertaking the work set forth herein pursuant to a proposed Administrative Order on Consent. By letter dated September 30, 1985, Respondent declined to consent to said Order.

DETERMINATION BY THE REGIONAL ADMINISTRATOR

28. Based on the above Findings, and the entirety of the Administrative Record, and pursuant to Section 106(a) of CERCLA, the Regional Administrator has determined that the release and threatened release of one or more hazardous substances from the facility may present an imminent and substantial endangerment to the public health, welfare and the environment.

ORDER

29. Based on the foregoing FINDINGS AND DETERMINATION, IT IS HEREBY ORDERED that to protect the public health, welfare and the environment, it is necessary that certain actions be taken to abate the release and threat of release of hazardous substances at and from the facility into the environment. Respondent shall undertake corrective actions at the facility in accordance with the directives and schedule specified below. All activities set forth below shall be initiated and completed as soon as possible even though maximum time periods for their completion are specified herein.

Description of Work

30. Within fourteen (14) calendar days of the effective date of this Order, Respondent shall submit to EPA a Detailed Work Plan with respect to accomplishing the following:

a. Proper off-site disposition of the tanks and trailer referred to in paragraph 14 above, and their contents.

b. Excavation and proper off-site disposal of any and all visibly contaminated soils and other visibly contaminated materials which may result or have resulted from the release of hazardous substances from the tanks and trailer referred to in paragraph 14 above.

The Detailed Work Plan shall include, but should not necessarily be limited to, the following:

i. a detailed time schedule for performance of the specific tasks set forth in this Order and a detailed description of how these tasks will be accomplished,

ii. a map or sketch depicting all sampling locations and the number and types of samples to be obtained at each sampling location,

iii. the overall site operations plan for performance of tasks specified in this Order, including identification of contractors and subcontractors and their respective responsibilities,

iv. a health and safety plan, and

v. a contingency plan for conducting site activities.

Submittal of the Detailed Work Plan shall be made to the Regional Administrator, EPA Region II, with copies sent to the OSC and to the Chief, Site Investigation and Compliance Branch, Emergency and Remedial Response Division, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York 10278, Attention: Ms. Janet Feldstein, Environmental Engineer.

31. EPA will review the Detailed Work Plan and comment thereon in writing. Within 3 business days of receipt of EPA's comments, Respondents will have an opportunity to meet with EPA to discuss such comments before they become final. Within 5 business days of receipt of the final EPA comments, Respondents shall commence implementation of the work plan as amended by such final comments (hereinafter, the EPA-approved work plan). The EPA-approved work plan shall be deemed incorporated into this Order.

32. The contents of the tanks and trailer referred to in paragraph 14 shall be sampled and analyzed to characterize the material for proper handling and disposal. Where inspection of these contents reveals several phases to be present (e.g., sludge, aqueous, oil), each phase shall be sampled individually.

33. Visibly contaminated soil shall be sampled and analyzed as in paragraph 32, above. Final determination of what constitutes visibly contaminated soil will be made by the On-Scene Coordinator.

34. All work pursuant to this Order shall be completed as soon as possible but in no event later than two months after the commencement of work under the EPA-approved work plan unless specifically approved by EPA in writing.

Designated Coordinator, On-Scene Coordinator, Other Personnel, and Modifications to EPA-Approved Work Plan

35. Not later than one (1) business day after the effective date of this Order, Respondent shall select a coordinator, to be known as the Designated Coordinator, and shall submit the name, address, and telephone number of the Designated Coordinator to the EPA On-Scene Coordinator. The Designated Coordinator shall be responsible for oversight of the implementation of this Order. All EPA correspondence to the Respondent shall be sent to the Designated Coordinator, with a copy to one other person designated by the Respondent. The name, address, and telephone number of the current EPA Region II On-Scene Coordinator is: (to be designated) EPA will notify the Designated Coordinator if EPA's On Scene Coordinator should change.

36. All activities required of Respondent under the terms of this Order shall be performed only by well-qualified persons possessing all necessary permits, licenses, and other authorizations required by federal, state, and local governments.

37. In the event of an inability or anticipated inability on the part of Respondent to perform or to timely perform any of the activities required under the Order, the Designated Coordinator shall immediately inform the EPA of the reason for, and date and length of such inability to perform and the actions taken or to be taken by Respondent to avoid or mitigate the impact of such inability to perform, including the proposed schedule for such actions.

38. As appropriate during the course of implementation of the immediate corrective actions at the Facility, Respondent or Respondent's consultants or contractors, acting through the Designated Coordinator, may confer with the EPA concerning those actions. Based upon new circumstances or new information not in the possession of EPA on the date of this Order, the Designated Coordinator may request, in writing to EPA, approval of a modification of the EPA-approved work plan. If approved by the EPA, such modification shall be implemented immediately by Respondent.

39. In the event of a significant change in conditions at the Facility, the Designated Coordinator shall notify the OSC immediately at the following emergency telephone numbers: 201-548-8730 or 201-321-6670. In the event the EPA determines that the activities performed pursuant to this Order, or significant changes in conditions at the Facility, pose a substantial threat of immediate and significant risk of harm to human life or health or the environment, EPA may direct Respondent to stop further implementation of the corrective actions or to take other and further actions reasonably necessary to abate the threat. This provision is not to be construed so as to limit any rights EPA may have under 40 CFR §300.65 or any other applicable provision of the NCP, or under any other applicable law or regulation.

Reporting Requirements

40. Respondent shall provide written weekly progress reports to EPA with respect to all actions and activities undertaken pursuant to this Order.

41. All submittals and notifications to EPA pursuant to this Order shall be made in writing to Ms. Janet Feldstein (whose address appeared above in paragraph 30), and the OSC (whose address appeared above in paragraph 35).

Access and Availability of Data

42. Unimpeded access to the Facility shall be provided by Respondent to EPA and NJDEP, as well as to their respective representatives, agents, employees, contractors, and consultants. Respondent shall permit such persons to be present on the Facility at any and all times and to observe any and all activities conducted pursuant to this Order. EPA and NJDEP representatives or agents shall also have unimpeded access to any portion of or structure at the Facility.

43. EPA and NJDEP shall have full access to all records, including but not limited to contractual documents, maintained or created by Respondent or their contractors or consultants in connection with implementation of the work under this Order.

44. In addition, all data, information, and records in connection with the implementation of work under this Order, shall, without delay, be available to EPA on request, and all employees of all persons, including contractors, who engage in activity under this Order shall be available to and shall cooperate with the United States and/or EPA. No data, information, or records shall be destroyed for eight years without either the express written approval of EPA or a written offer by the Respondent to provide such material to EPA, followed by EPA's written rejection of that offer.

45. Upon request by the EPA, Respondent shall provide split samples of any material sampled in connection with implementation of this Order.

General Provisions

46. This Order shall apply to and be binding upon Respondent and Respondent's officers, directors, employees, agents, servants, receivers, trustees, successors, and assigns and upon all persons, including but not limited to firms, corporations, subsidiaries, contractors, and consultants, acting under or for Respondent.

47. All actions and activities carried out by Respondent pursuant to this Order shall be done in accordance with all applicable federal, state, and local laws, regulations, and requirements.

48. All waste disposal conducted by Respondent pursuant to this Order shall comply with all requirements of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §6901 et seq., the Toxic Substances Control Act (TSCA), 15 U.S.C. §2601 et seq., and all regulations promulgated pursuant thereto, as well as all applicable State laws and regulations.

49. All sampling and analyses for proper handling and disposal shall conform to EPA Quality Assurance/Quality Control and Chain of Custody procedures as directed by the EPA and in conformance with Section 10 and 1.3 of the EPA publication entitled "Test Methods for Evaluating Solid Waste" (SW-846 July, 1982 or as updated).

50. Neither EPA nor the United States, by issuance of this Order, assumes any liability for any injuries or damages to persons or property resulting from acts or omissions by Respondent, or Respondent's employees, agents, contractors, or consultants in carrying out any action or activity pursuant to this Order; nor shall EPA or the United States be held as a party to any contract entered into by Respondent or Respondent's officers, employees,

agents, contractors, or consultants in carrying out any action or activity pursuant to this Order.

51. Nothing herein shall constitute or be construed as a satisfaction or release from liability with respect to any conditions or claims arising as a result of past, current, or future operations, ownership, or use of the Facility by Respondent, Respondent's agents, contractors, lessees, successors, or assigns.

52. Nothing in this Order constitutes a decision on preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C 9611(a)(2).

Enforcement

53. Failure of Respondent to expeditiously and completely carry out the terms of this Order may result in EPA taking the required actions unilaterally, pursuant to §104(a)(1) of CERCLA, 42 U.S.C. §9604(a)(1).

54. Violation of this Order as a result of Respondent's failure to comply with any provision herein, including but not limited to any failure to comply with any EPA-approved work plan prepared in compliance herewith, shall be enforceable pursuant to §§106(b) and 113(b) of CERCLA, 42 U.S.C. §§9606(b) and 9613(b). Respondent may also be subject to cost recovery, civil penalties and/or punitive damages of up to three times the amount of any costs incurred by EPA as provided in §§106(b), 107(a), and 107(c)(3) of CERCLA, 42 U.S.C. §§9606(b), 9607(a), and 9607(c)(3), for failure to comply with the terms of this Order. Nothing herein shall preclude EPA from taking any additional enforcement actions, and/or additional actions as it may deem necessary for any purpose, including the prevention or abatement of an imminent and substantial danger to the public health, welfare, or the environment arising from conditions at the Facility and recovery of the costs thereof; nor shall anything herein preclude DEP from taking legal action pursuant to State law.

55. Not later than three days from the date this Order is received by Respondent, Respondent may confer with EPA to discuss this Order, including its applicability, the Findings upon which the Order is based, the appropriateness of any action or activity required to be undertaken herein, or any other issues or contentions directly relevant to the issuance of this Order which Respondent may have regarding this Order. Such conference is not, and shall not be deemed to be, an adversary proceeding or part of a proceeding to challenge this Order, and no official stenographic record of such proceeding shall be kept. Should Respondent request a conference under this paragraph, Respondent may appear at such conference in person or by an attorney or other designated representative. Any request for a conference shall be made to Ms. Kathleen Chojnowski, Attorney, Superfund Branch, Office of Regional Counsel, United States Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York, 10278, telephone (212) 264-2211.

Effective Date

55. This Order shall become effective on the fourth working day following the date on which it is received by Respondent.

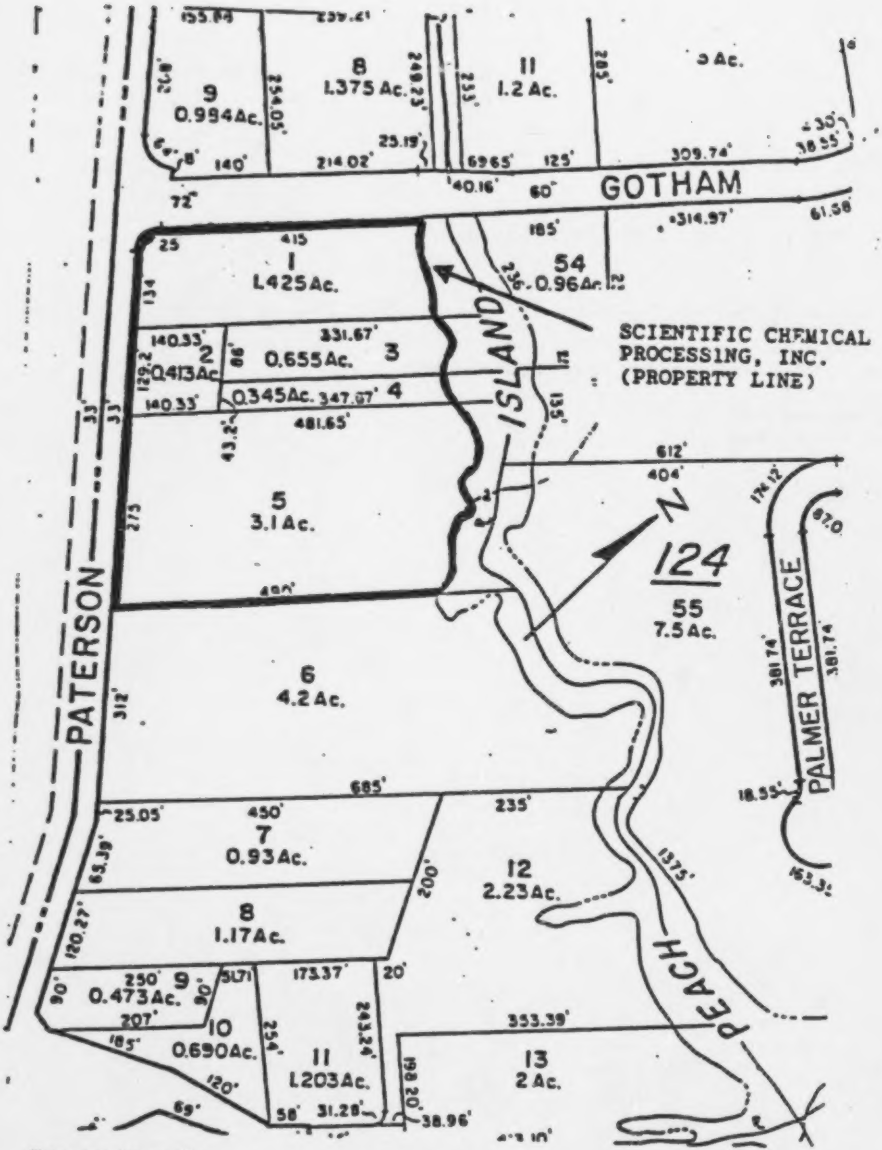
IT IS SO ORDERED:

U.S. ENVIRONMENTAL PROTECTION AGENCY

Christopher J Daggett

CHRISTOPHER J. DAGGETT
Regional Administrator
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

[illegible] 23 1985
Date of Issuance



SCIENTIFIC CHEMICAL
PROCESSING, INC.
(PROPERTY LINE)

GOTHAM
PATERSON
ISLAND
PEACH
PALMER TERRACE
124
N
9
0.994Ac.
8
1.375 Ac.
11
1.2 Ac.
1
1.425Ac.
2
0.413Ac
3
0.655Ac.
4
0.345Ac.
5
3.1Ac.
54
0.96Ac
55
7.5Ac.
6
4.2Ac.
7
0.93Ac.
8
1.17Ac.
9
0.473Ac.
10
0.690Ac.
11
1.203Ac.
12
2.23Ac.
13
2Ac.

Map not to scale
Source: NJDEP,
Figure 1 SCP Site at Paterson Plank Road and Gotham Road, Carlstadt Township, Bergen County, New Jersey

SCP

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

IN THE MATTER OF

AIR PRODUCTS & CHEMICALS, INC.
ALLIED CORPORATION
AMERICAN CAN CO.
AMERICAN CYANAMID(including LEDERLE LABORATORIES AND SHULTON, INC.)
AMERICAN FLANGE & MANUFACTURING COMPANY, INC.
AMERICAN HOECHST CORPORATION
AMERICAN INKS & COATINGS CORP.
AMERICAN STANDARD INC.
ARMSTRONG WORLD INDUSTRIES, INC.
ASHLAND CHEMICAL CO. (DIVISION OF ASHLAND OIL, INC.)
AT&T TECHNOLOGIES, INC.
BASF WYANDOTTE CORPORATION
BEE CHEMICAL CORPORATION
BENJAMIN MOORE & CO.
BER-MAR, INC.
BORDEN, INC.
BOWEN ENGINEERING, INC.
HERBERT G. CASE, JR.
CECOS INTERNATIONAL, INC.(for CECOS INTERNATIONAL, INC., BROWNING FERRIS INDUSTRIES, INC. and NEWCO CHEMICAL WASTE SYSTEMS, INC.)
CELLU-CRAFT, INC.
CHEMCOAT, INC.
CHEMICAL DYNAMICS CORPORATION
CHEMRAY COATINGS CORP.
CIBA-GEIGY CORPORATION
CITIES SERVICE OIL AND GAS CORP.
CONTINENTAL TECHNICAL FINISHES CORP.
CONVERTERS INK CO.
CUSTOM CHEMICALS CO., INC.
DART & KRAFT, INC.
DECORATIVE INDUSTRIES, INC.
DRI-PRINT FOILS, INC.
DURALAC, INC.
E.I. DUPONT DE NEMOURS & CO.
E.R. SQUIBB & SONS, INC.
ELL-BEE CHEMICAL COMPANY, INC.
ENVIRONMENTAL WASTE REMOVAL, INC.
ESSELTE PENDAFLEX CORP.
EXXON COMPANY, U.S.A.
FABERGE, INC.
FAIRCHILD CAMERA AND INSTRUMENT CORP.

ADMINISTRATIVE ORDER
ON CONSENT

Index No. II CERCLA-50114

GAF CORPORATION :
GANES CHEMICALS, INC. :
GENERAL ELECTRIC COMPANY :
GENERAL MOTORS CORPORATION :
GEORGIA-PACIFIC CORP(for XCEL CORP.):
GILBERT SPRUANCE COMPANY :
GRUMMAN AEROSPACE CORPORATION :
GTE PRODUCTS CORP. :
INLAND STEEL CONTAINER CORP. :
INMONT CORPORATION :
J. JOSEPHSON, INC. :
J. LANDAU & CO., INC. :
J.M. HUBER CORPORATION :
J.T. BAKER CHEMICAL CO. :
JOHN L. ARMITAGE & CO. :
JOHNSON & JOHNSON :
KEWANEE INDUSTRIES, INC. :
L.E. CARPENTER & CO. :
LANGER TRANSPORT CO. :
M & T CHEMICALS, INC. :
MAAS & WALDSTEIN CO. :
MACK TRUCKS, INC. :
MAGID CORPORATION :
MERCK & CO., INC. :
MOBAY CHEMICAL CORPORATION :
MOBIL CHEMICAL CO. :
MONSANTO CO. :
NEPERA, INC. :
NEW ENGLAND LAMINATES CO., INC. :
NEW PENN MOTOR EXPRESS, INC. :
OWENS-ILLINOIS, INC. :
PACKAGING SYSTEMS CORPORATION :
PAN CHEMICAL CORPORATION :
PACQUET ONEIDA, INC. :
PERK CHEMICAL CO., INC. :
PERMACEL :
PFIZER INC. :
DOMINICK PRESTO :
PYROLAC CORPORATION :
QUALITY CHEMICALS, INC. :
RCA CORPORATION :
RECYCLING INDUSTRIES, INC. :
RELIANCE UNIVERSAL, INC. :
REVLON, INC. :
REYNOLDS METALS COMPANY :
RHEEM MANUFACTURING CO. :
RIDGE PRINTING CO., INC. :
ROHM & HAAS COMPANY :
SCHENECTADY CHEMICALS, INC. :
SCIENTIFIC CHEMICAL PROCESSING, INC.:
SHERWIN-WILLIAMS CO. :
LEIF R. SIGMOND :
SIMON WRECKING CO., INC. :
STAR EXPANSION COMPANY :

SWOPE OIL & CHEMICAL CO. :
TECHNICAL COATINGS CO. :
TENAX FINISHING PRODUCTS CO. :
TENNECO RESINS, INC. :
TRANSCO PRODUCTS CORP. :
TROY CHEMICAL CORP. :
TUNGSTEN PRODUCTS CORP. :
U.S. PIPE & FOUNDRY CO. :
U.S. POLYMERIC (A DIVISION OF HITCO):
UNION CARBIDE CORP. :
VORAC COMPANY :
WESLEY LACQUER CO., INC. :
WESTINGHOUSE ELECTRIC CORP. :
WHITTAKER CORPORATION :

Respondents.:
:
Proceeding Under Section 106(a) :
of the Comprehensive Environmental Response, Compensation :
and Liability Act, 42 U.S.C. :
§9606(a) :
:
--------------------------------------x

JURISDICTION

The following Administrative Order on Consent ("Order") is entered into with the above-captioned Respondents pursuant to the authority vested in the President of the United States by §106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. §9606(a), which authority was delegated to the Administrator of the United States Environmental Protection Agency (EPA) by Executive Order 12316, 46 Fed. Reg. 42237 (August 20, 1981) and duly redelegated to the Regional Administrator, EPA Region II on March 17, 1983. Pursuant to that authority, EPA hereby makes the following Findings and Determination and issues the following Order on Consent. Pursuant to Section 106(a) of CERCLA, the State of New Jersey Department of Environmental Protection (NJDEP) has been notified of this Order.

DEFINITIONS

1. As used in this Order, unless otherwise clearly required by context, the following terms shall have the following meanings:

A. Respondents shall include all individuals, companies, partnerships, or other business entities listed in the caption of this Order.

B. Generator Respondents shall include all Respondents with the exception of Leif R. Sigmond, Dominick Presto, Herbert Case, Mack Barnes, Scientific Chemical Processing, Inc., Inmar Associates, and Transporter Respondents.

C. Transporter Respondents shall include any Respondents who accepted hazardous substances for transport by air, rail, highway, water, etc. to the facility.

D. Owner/Operator Respondents shall include Inmar Associates, Leif R. Sigmond, Dominick Presto, Herbert Case, Mack Barnes, and Scientific Chemical Processing, Inc.

E. Facility shall mean real property located at 216 Paterson Plank Road, Carlstadt, New Jersey and occupying Block 124, Lots 1 through 5 on the tax map of Bergen County, Township of Carlstadt.

F. CERCLA shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §9601 *et seq.*, P.L. 96-510.

G. Hazardous Substance shall mean any substance that falls within the definition of "Hazardous Substance" as defined in Section 101(14) of CERCLA, 42 U.S.C. §9601(14).

H. Designated Coordinator shall mean the person designated by Respondents which person shall be charged with the duty of, at all times, being knowledgeable about and overseeing the progress of all work performed pursuant to this Order.

I. National Contingency Plan (NCP) shall mean the National Oil and Hazardous Substances Contingency Plan promulgated by EPA pursuant to §105 of CERCLA, 42 U.S.C. §9605, and codified at 40 CFR Part 300, and all amendments or modifications thereto.

J. Remedial Action shall have the meaning set forth in the portion of the NCP found at 40 CFR §300.6.

STATEMENT OF PURPOSE

2. EPA and the consenting parties, acting in good faith to resolve certain problems arising out of this matter, to further the public interest, to avoid prolonged and complicated litigation between the parties, and to undertake a remedial investigation and feasibility study to determine the extent to which hazardous substances are present at the site, and to develop remedial alternatives, without trial or adjudication of any issues of fact or law and without admission by the consenting parties to liability for any purpose, enter into this Consent Order.

EPA FINDINGS OF FACT

3. Each Respondent is a person, as defined in §101(21) of CERCLA, 42 U.S.C §9601(21), and a responsible party under Section 107(a) of CERCLA, 42 U.S.C. §9607(a). It is EPA's position that each Respondent is jointly and severally responsible, with each and every other Respondent, for carrying out the provisions of this Order.

4. The hazardous substances referred to in this Order shall mean any substances meeting the definition of "Hazardous Substance" as defined in §101(14) of CERCLA, 42 U.S.C. §9601(14).

5. Inmar Associates, Inc. is a corporation organized under the laws of the State of New Jersey and doing business in the State of New Jersey, which owns a parcel of property in Carlstadt, Bergen County, New Jersey. The property is bordered on the north by Peach Island Creek, a surface water of the United States, on the south by Paterson Plank Road, on the west by Gotham Parkway, and on the east by Carolina Trucking Company ("the Inmar Property"). The property consists of Block 124, Lots 1 through 5, Township of Carlstadt (See Figure 1, attached).

6. During the period commencing in or about 1970 and continuing until in or about 1980, the Inmar property was leased by Scientific Chemical Processing, Inc. (a corporation organized under the laws of the State of New Jersey), which operated on the property a waste collection, transportation, treatment and disposal service. The property leased by Inmar Associates, Inc. to Scientific Chemical Processing, Inc. constitutes a "Facility," as that term is defined in §101(9) of CERCLA, 42 U.S.C. §9601(9). The property shall hereinafter be referred to as "the site" or "the facility."

7. During the period of its operation, Scientific Chemical Processing, Inc. accepted, transported, transferred, stored, reprocessed, reclaimed, treated, blended, and disposed of certain materials which contained hazardous substances.

8. The Owner/Operator Respondents to this Order owned the facility and/or operated businesses at the facility which engaged in the transfer, storage, reprocessing, reclamation, reuse, blending, treatment, and/or the disposal of hazardous substances.

9. The Generator Respondents to this Order made arrangements with transporters and/or Scientific Chemical Processing, Inc. for the transport, storage, treatment or disposal of hazardous substances, which include certain substances chemically identical to or similar to those released and/or in danger of being released from the facility to the environment.

10. The Transporter Respondents to this Order accepted hazardous substances for transport to the facility.

11. Based upon inspections performed at the site by the NJDEP and EPA between 1977 and 1984, sampling and chemical analyses, and environmental surveys conducted at the site, EPA has determined that the material which has been released, or threatens to be released, into the environment from spills and/or leaking containers at the site, contains hazardous substances, and that surface water, ground water, air and soil at the site have been or threaten to be contaminated. Specifically, analyses of waste samples performed during 1979 and a NJDEP site inspection report dated October 10, 1980 (which cites a June 1980 inventory of waste at the site) indicate the following wastes and/or constituents of waste were released or threatened to be released from the site: PCB-containing materials, acids, benzene, chloroform, trichloroethylene, toluene, styrene, xylenes, carbon tetrachloride, chloroethane, ethylbenzene, ethylacetate, isopropanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, phenolic resin, tetrachloroethane, tetrachloroethlene, trichloroethane, arsenic, mixed solvents, paint sludge and solvent sludge.

12. Based on the aforementioned inspections, sampling and chemical analyses, and environmental surveys, the New Jersey Supreme Court in October 1980 refused to stay the effectiveness of NJDEP's order that Scientific Chemical Processing, Inc. cease operations.

13. At that time, there were approximately 56 tanks and/or tank trailers and 50 drums containing hazardous substances at the site. According to an Inventory prepared by Scientific Chemical Processing, Inc., in December 1980, various wastes containing hazardous substances still remained at the site, including, but not limited to, solvents and thinners, etching solutions, methanol/phosphoric acid solutions, sodium sulfate solutions, and fuel residues. During 1984, many of the aforesaid tanks/tank trailers and drums were removed from the site by Inmar Associates, under NJDEP supervision. NJDEP reported that many were severely discolored, indicating leaks, and some of the tanks had makeshift patches.

14. At present, there are 4 tanks and 1 tank trailer remaining at the site. Lab analyses performed for Inmar Associates indicate that the liquids, solids, and/or sludges in these tanks/tank trailer contain PCBs. EPA has evidence of leaking, and some of the tanks are patched. There is no containment system in place around the tanks.

15. EPA has determined that many of the substances at the facility are hazardous substances, have been shown to cause a variety of adverse effects to exposed populations, and include known or suspected carcinogens and/or mutagens.

16. The presence of such hazardous substances at the site, and their past and/or potential future migration to surrounding soils, surface water, and groundwater, constitute an actual

release or threatened release from the facility within the meaning of Section 101(22) of CERCLA, 42 U.S.C. §6901 (22).

17. Based on present information, EPA has determined that:

(a) The site is located on a filled-in section of the Hackensack Meadows. The fill, which consists of organic silt, is underlain by clay deposits interspersed with beds of sand and gravel. These clay deposits, and sand and gravel beds are discontinuous and may not comprise a major confining unit. The bedrock at the site is the Brunswick Formation, which underlies the clay, sand and gravel deposits at depths ranging from approximately 40 to 120 feet in the vicinity of the site.

(b) The two major aquifers in the area of the site are the Brunswick Formation and the Quarternary age stratified drift located along river channels. The Brunwick Formation yields water from fractures in the rock. Fracturing decreases with depth, and most of the groundwater is produced by the upper, highly fractured part of the formation.

(c) There are approximately 21,000 people living within three miles of the site. The primary water supply for this population is groundwater. The nearest well is located about 4000 feet from the site.

(d) The hydrogeologic conditions described in paragraphs 17(a) and (b) constitute conditions which may enhance the vertical transmission of hazardous substances in the groundwater. The groundwater in the area is used by the local populations for drinking purposes.

18. Peach Island Creek borders the site on the north. This creek has been designated as Freshwater-2 (FW-2) by NJDEP. FW-2 criteria state that such waters should "be suitable for maintenance, migration, and propagation of the natural ecosystem and support biota." Peach Island Creek joins Berrys Creek Canal approximately 1500 feet northwest of the site. Berrys Creek Canal joins the Hackensack River approximately 2 miles downsteam of its confluence with Peach Island Creek. The Hackensack River enters the Atlantic Ocean in the New Jersey Bay approximately 7 miles south of the site. Contamination of Peach Island Creek would pose a threat of contamination to these other navigable waters.

19. Visual observations by EPA and NJDEP of discoloration of and leachate seepage into Peach Island Creek noted during various site inspections indicate possible contamination of surface water, creek sediment, soil, and groundwater.

20. The site is on the National Priorities List ("NPL"), 40 CFR Part 300, Appendix B, which has been issued pursuant to Section 105(8)(b) of CERCLA, 42 U.S.C. §9605(8)(b).

21. In order to determine the nature and extent of the

release and threatened release at the site, and to select an appropriate remedial alternative, a remedial investigation and feasibility study (RI/FS) must be conducted in conformance with the National Contingency Plan, 40 CFR Part 300. The Work Plan submitted pursuant to papragraph 25, below, which will be appended hereto and labelled Appendix I upon approval by EPA, has been prepared by Respondents for use in performing the RI/FS.

22. The foregoing Findings and determinations have been made by EPA and are specifically denied by Respondents. Respondents deny that conditions at the Scientific Chemical Processing Carlstadt site or surrounding area present or may present an imminent and substantial endangerment to the public health, welfare, and/or the environment within the meaning of §106(a) of CERCLA. By consenting to this Order, or by taking any actions under this Order, Respondents do not concede the correctness of any fact alleged or validity of any legal finding or determinations asserted in the foregoing Findings or elsewhere in this Order. Neither this Order nor any action taken by Respondents pursuant to this Order shall constitute any evidence against Respondents, an admission of liability or responsibility by Respondents, a waiver by Respondents of any rights or defenses, nor an estoppel against Respondents with respect to any matter, act, claim, or thing related in any manner to the facility for any purpose other than in an action by EPA to enforce the terms of this Order. No payment(s) by Respondents pursuant to this Order, except for those under paragraph 31.C., below, shall be construed to be a fine, penalty, or monetary sanction. Nevertheless, Respondents agree not to contest the authority or jurisdiction of the Regional Administrator to issue this Order, and agree not to contest the validity or terms of this Order in any action brought by EPA to enforce the terms hereof.

DETERMINATION BY THE REGIONAL ADMINISTRATOR

23. Based on the above Findings, and the entirety of the administrative record, and pursuant to Section 106(a) of CERCLA, the Regional Administrator has determined that the release and threatened release of one or more hazardous substances from the facility may present an imminent and substantial endangerment to the public health, welfare and/or the environment.

ORDER

24. Based on the foregoing, it is hereby ordered and agreed that the Respondents shall undertake a remedial investigation and feasibility study at the facility in accordance with the requirements specified below. All activities performed pursuant to this Order shall be completed as soon as practicable even though time periods for their completion may be specified herein or in the Work Plan.

25. Remedial Investigation/Feasibility Study Work Plan

A. Respondents have submitted to EPA a work plan for the performance of a Remedial Investigation/Feasibility Study ("RI/FS Work Plan"). EPA has reviewed the RI/FS Work Plan for consistency with the National Contingency Plan, 40 CFR Part 300, EPA's "Guidance on Remedial Investigations Under CERCLA, May, 1985," and EPA's "Guidance on Feasibility Studies Under CERCLA, April, 1985." EPA has commented thereon in writing to Respondents, and Respondents have had an opportunity to meet with EPA and discuss such comments before they became final. Within 5 days of the effective date of this Order, Respondents shall amend the RI/FS Work Plan as required by those comments or as otherwise approved by EPA and submit the amended RI/FS Work Plan to EPA. EPA will make the final determination as to the sufficiency of the RI/FS Work Plan submitted by Respondents. At such time as EPA determines that the RI/FS Work Plan is acceptable, EPA will transmit to Respondents a written statement to that effect, and the RI/FS Work Plan will be appended to this Order and labelled Appendix I.

26. Remedial Investigation

A. According to the schedule presented in the EPA-approved RI/FS Work Plan ("the Work Plan") attached as Appendix I, Respondents shall submit to EPA for review and approval a detailed Site Operations Plan for the performance of a Remedial Investigation (RI) in conformance with the National Contingency Plan, EPA's "Guidance on Remedial Investigations Under CERCLA, May 1985," and the Work Plan of this Order. The Site Operations Plan shall fully describe how those activities called for in the Work Plan will be implemented, and shall include but should not necessarily be limited to the items in Task 2, Section 2.4.2. (Site Operations Plan) of the Work Plan and items i through x, below:

i. a detailed map of the site depicting all sampling locations;

ii. the number and types of samples to be obtained at each sampling location;

iii. the overall management plan, including identification of contractors and subcontractors and their respective responsibilities for performance of the specific tasks set forth in Appendix I;

iv. a detailed schedule for performance of the specific tasks;

v. a Quality Assurance/Quality Control (QA/QC) plan for all investigations to be performed [the QA/QC plan shall be completed in accordance with Section 10 of the publication, Test Methods for Evaluating Solid Waste (SW-846) an the guidance appended hereto and labelled Appendix II];

vi. provision for completing a QA/QC evaluation of laboratory data (to validate the data) within 2 weeks of completion of laboratory analyses;

vii. a description of the chain of custody procedures to be followed, which shall conform to those set forth in Section 1.3 of SW-846;

viii. a Health and Safety plan;

ix. a Contingency plan for conducting site activities; and

x. the curriculum vitae of all professionals expected to perform the RI, and a description of the responsibilities and the anticipated levels of effort of each such professional.

B. EPA will review the Site Operations Plan and comment thereon in writing. EPA will address its comments to the conformance of the Site Operations Plan with sound management, engineering and scientific practices; technological feasibility; established environmental monitoring procedures; and consistency with the Work Plan. EPA will include in its comments an explanation of the basis of its comments. Within 5 business days of receipt of EPA's comments, Respondents will have an opportunity to meet with EPA to discuss such comments before they become final. Within 7 days of Respondents' receipt of the written final EPA comments, Respondents shall amend the Site Operations as required by those comments or as otherwise approved by EPA and submit the modified document to EPA.

C. EPA will make the final determination as to the sufficiency of the Site Operations Plan. At such time as EPA determines that the SOP is acceptable and in conformance with the NCP, EPA will transmit to Respondents a written statement to that effect.

D. Respondents shall perform the RI in conformance with the approved SOP and the Work Plan pursuant to the schedule set forth in the Work Plan. Respondents shall complete all activities specified therein and shall submit to EPA for review and approval a report detailing the results of the remedial investigation ("Preliminary RI Report").

E. EPA will review the Preliminary RI Report and comment thereon in writing; EPA will include an explanation of the basis of its comments. Within 5 business days of receipt of EPA's comments, Respondents will have an opportunity to meet with EPA to discuss such comments before they become final. Within 30 days of the receipt of such written final EPA comments, Respondents shall amend the said Report as required by those comments or as otherwise agreed upon by EPA, and shall promptly submit the amended report to EPA ("the RI Report"). EPA may, if necessary to accomplish the goals of the RI/FS as stated in the approved Work Plan, require the performance of additional investigatory work consistent with the provisions of the National Contingeny Plan and in conformance with a schedule to be set forth by EPA.

F. EPA will make the final determination as to the sufficiency of the RI Report and any additional studies. At such time as EPA determines that the RI Report is acceptable and in conformance with the NCP, EPA will transmit to Respondents a written statement to that effect.

27. Feasibility Study

A. Respondents shall perform a Feasibility Study in conformance with the following: National Contingency Plan, 40 CFR Part 300 (including 40 CFR 300.68(a) through (j)); EPA approved Work Plan (Appendix I), Section 3.0, Tasks 7-12; and EPA's "Guidance on Feasibility Studies Under CERCLA, April 1985."

B. Respondents shall perform the Feasibility Study (FS) in conformance with the Work Plan pursuant to the schedule set forth in the Work Plan. Respondents shall submit to EPA for review a Preliminary Feasibility Study Report which shall include a recommended remedial alternative. EPA will review and comment on the Preliminary FS Report.

C. Within 15 days of receipt of written final EPA comments on the Preliminary FS Report, Respondents shall modify that report as may be necessary to conform with such comments and submit the modified report to EPA for approval, and/or shall initiate such additional engineering evaluations as EPA finds necessary, in accordance with a schedule set forth by EPA. With the Preliminary FS Report, as amended, Respondents also shall submit a conceptual design for the recommended remedial action and the design shall conform to a format acceptable to EPA. The Preliminary FS Report, as amended, and the conceptual design for the recommended remedial action shall constitute the "Draft FS Report" for publication pursuant to paragraph 27.E., below.

D. EPA will make the final determination as to the sufficiency of the Draft FS Report submitted by Respondents. At such time as EPA determines that the Draft FS Report is sufficient, and acceptable for publication pursuant to Paragraph 27.E., below, EPA will transmit to Respondents a written statement to that effect.

E. Following submittal of the Draft FS Report, EPA will announce the availability of both the RI Report and the Draft FS Report to the public for review and comment. Following the public comment period (which may include both written and oral comments), EPA will determine if the Reports should be modified or accepted as submitted, and will so notify Respondents in writing. Within 5 business days of EPA's written determination, Respondents will have an opportunity to meet with EPA to discuss such modifications. Unless otherwise approved by EPA, within 30 days of receipt of EPA's written determination that either the RI Report or the Draft FS Report should be modified, Respondents shall modify either or both of the reports (which may, inter alia, entail a change in the recommended remedial alternative) as directed by EPA or as otherwise approved by EPA, and submit the modified document(s) to EPA. Should EPA require any modification(s), Respondents reserve their right to comment on, or disagree with these modifications. Respondents' comments on any EPA modification(s) shall be set forth in footnotes in or an appendix to the modified document. EPA regulations, policy and guidance in effect at the time such public comment period is initiated shall govern the procedures to be followed. EPA will make the final determination in any dispute regarding the sufficiency of the RI Report and the FS Report.

F. The Final FS Report shall not select a remedial alternative. EPA will make the final selection of the remedial alternative(s) to be implemented.

28. Sampling and Reporting

A. Upon request by EPA, Respondents shall provide EPA or its designated representatives with a reasonable number of duplicate and/or split samples of any samples collected in furtherance of work performed in accordance with this Order.

B. The Respondents shall provide monthly written progress reports to EPA. At a minimum, these progress reports shall: (1) describe all actions and activities undertaken toward achieving compliance with this Order, and (2) include all plans and procedures completed subsequent to EPA approval of the RI/FS Work Plan, during the past month as well as such actions and plans which are scheduled for the next month. These reports are to be submitted to EPA by the tenth day of each month following the effective date of this Order.

C. Upon request by EPA, all data and information, including raw sampling and other monitoring data, generated pursuant to this Order by Respondents or on behalf of Respondents, shall immediately be made available to EPA or its designated representatives.

D. Respondents shall give EPA four (4) business days advance notice of the following expected activities under this Order: all monitoring well activities, including but not limited to drilling, installation and testing, and all on-site and off-site sampling activities.

E. EPA and the Respondents agree that each shall preserve, during the pendency of this Order and for a minimum of six (6) years after its termination, all data, records and documents in their possession or in the possession of their divisions, employees, agents, accountants, contractors, or attorneys, concerning the implementation of work under this Order, despite any document retention policy to the contrary. No data, information, or records shall be destroyed for six years after the termination of work under this Order without either the express written approval of EPA, or a written offer by Respondents to provide such material to EPA followed by EPA's written rejection of that offer. After this six year period, the Respondents shall notify EPA within 30 days prior to the destruction of any such documents. Upon request by EPA, the Respondents shall make available to EPA such records or copies of any such records unless otherwise privileged under law.

F. All records prepared or compiled by Respondents and delivered to EPA in the course of implementing this Order shall be available to the public unless identified as confidential by a Respondent in conformance with 40 CFR Part 2. Records so identified shall be treated as confidential only in accordance with the applicable confidentiality regulations. Sampling and other monitoring data, and hydrological and geological information, may not be considered confidential. Furthermore, it is understood by the parties that EPA may release all such records to the NJDEP.

G. The original and nine copies of all correspondence, reports, work plans and other writings required under the terms of this Order to be submitted to EPA shall be sent by certified mail, return receipt requested to:

Chief, Site Investigation and Compliance Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

Attention: SCP-Carlstadt Project Officer

One copy of all such writings shall be transmitted by certified mail, return receipt requested to:

Chief, Superfund Branch
Office of Regional Counsel
U.S. Environmental Protection Agency
Room 437
26 Federal Plaza
New York New York 10278

Attention: SCP-Carlstadt Site Attorney

29. EPA Communications and Decisions

A. Written communications from EPA to Respondents will be sent by certified mail, return receipt requested to:

Respondents' Facility Coordinator
(address to be determined)

Thomas M. Armstrong, Counsel
Corporate Environmental Programs
General Electric Company
3135 Easton Turnpike-W1A
Fairfield, CT 06431.

B. As appropriate during the course of implementation of the remedial actions under this Order, Respondents or their consultants or contractors, acting through the Facility Coordinator, may confer with the EPA concerning those actions. Based upon new circumstances or new information not in the possession of EPA on the date of this this Order, the Facility Coordinator may request, in writing to EPA, approval of a modification of the EPA-approved Work Plan. If approved by the EPA, such modifications shall be implemented immediately by Respondents.

C. All decisions of EPA under this Order, including approvals; disapprovals; grants or denials of requests for extensions of time; and requests for modifications of reports, work plans, specifications, schedules and other work outputs will be communicated in writing to Respondents by the Chief, Site Investigation and Compliance Branch, U.S. Environmental Protection Agency, 26 Federal Plaza, New York, New York 10278.

D. No informal advice, guidance, suggestions or comments by EPA or NJDEP regarding reports, plans, specifications, schedules or any other writings submitted by Respondents shall be construed as relieving Respondents of their obligation to obtain such formal approvals as may be required by this Order. However, oral approvals may be obtained for minor matters if they are confirmed in writing within 2 business days.

30. Respondents' Facility Coordinator and EPA Inspection Authority

A. Within 15 days of the effective date of this Order, Respondents shall provide EPA with the name, title, address, phone number and qualifications of their designated Facility Coordinator, who shall be responsible for oversight of the implementation of this Order, including all activities required herein. The Facility Coordinator shall have technical expertise sufficient to adequately oversee all aspects of the work contemplated by this Order. All correspondence and other writings from EPA to Respondents shall be made available to the Facility Coordinator. Counsel for Respondents shall not be eligible to be Facility Coordinator. Respondents shall have the right to change their Facility Coordinator at any time. However, Respondents shall notify EPA in writing at least five (5) working days prior to any such change. If such advance notice is not feasible, notice shall be given by the best means and as far in advance as possible under the circumstances.

B. EPA and EPA's representatives, including but not limited to their employees, agents, contractors and consultants, shall have authority to observe the work being carried out pursuant to this Order, for the purposes of inspecting and observing Respondents' progress in implementing the requirements of this Order, or for the purpose of verifying the data submitted to EPA by Respondents concerning such implementation. To the maximum extent possible under the law, Respondents shall forthwith honor all requests by EPA or its representatives to observe the work being carried out pursuant to this Order and also, at reasonable times, shall permit such persons to inspect and copy all writings, including all data, in any way pertaining to work undertaken pursuant to this Order. Respondents shall not be required to permit anyone who is not bound by EPA's confidentiality regulations to inspect or copy any writing which is entitled to confidential treatment under Title 40 CFR Part 2. Notwithstanding the above, EPA hereby retains all its inspection authority under CERCLA and the Resource Conservation and Recovery Act, 42 U.S.C. §6901 et seq. NJDEP and its designated representatives, as well as any EPA contractor and its representatives, shall be eligible to be designated representatives of EPA under this paragraph.

C. Respondents shall not interfere with EPA access to the Site or any other premises upon which work under this Order may be performed. Further, to the extent practicable and within their rights and abilities to do so, (including bringing the terms of this paragraph to the attention of their selected contractors) Respondents shall support and assist EPA in obtaining access to the site and other premises at which work in furtherance of the requirements of this Order is carried out, and shall similarly support and assist EPA in exercising its inspection and other authority under this provision including, but not limited to review and copying of records.

31. Enforcement Actions

A. In the event that Respondents fail to adhere to any requirement of this Order; or, notwithstanding compliance with the terms of this Order, upon the occurrence or discovery of a situation as to which EPA would be empowered to take any further response action(s), including but not limited to the prevention or abatement of an imminent and substantial endangerment to the public health, welfare or the environment arising from conditions at the facility; or under any other circumstances authorized by law and not inconsistent with terms of this Order, EPA reserves the right to, after notice to Respondents and other identified potentially responsible parties, institute federally-funded response activities and subsequently pursue cost recovery actions available, and/or EPA may issue orders to Respondents pursuant to available statutory authority. Respondents do not hereby consent to any future action taken by EPA under this paragraph.

B. EPA reserves its right to bring an action against Respondents pursuant to Section 107 of CERCLA, 42 U.S.C. §9607, for recovery of any costs incurred in oversight of Respondents' implementation of this Order, and any other costs incurred by EPA in connection with investigative or response activities at the Site (to include all costs associated with EPA's performance of the RI/FS or any part thereof, in the event that Respondents fail to complete the RI/FS in conformance with the requirements of this Order).

C. If Respondents fail, without prior EPA approval (which shall not be unreasonably withheld) to conform with the requirements set forth in paragraphs 25, 26, and 27 of this Order by the time periods specified therein (unless caused by a force majeure event as defined in paragraph 32.H, below), Respondents shall each make payments to the EPA in the amount indicated below for each day of noncompliance:

Days After Required Date	Stipulated Penalties
0-5	$ 0 for each day
6-10	$ 250 for each day
11-20	$ 500 for each day
greater than 21	$ 1000 for each day

After 30 consecutive days of noncompliance, EPA reserves the right to pursue civil penalties of up to $5000 per day pursuant to Section 106(b) of CERCLA, in lieu of these stipulated penalties. Any such penalty shall be due and payable ten days following receipt of a written demand by EPA describing the basis for the penalties. Payment of such stipulated civil penalties shall be made by cashier's or certified check payable to the "Hazardous Substances Response Trust Fund", and mailed to the following address with a notation of the docket number of this Order: EPA - Superfund, P.O. Box 371003M, Pittsburgh, Pennsylvania 15251. A copy of EPA's demand letter shall accompany the payment; a copy of the transmittal letter shall be sent to the Chief, Site Investigation and Compliance Branch, EPA, Region II.

D. Notwithstanding any other provision of this Order, EPA reserves the power to take enforcement actions for any violation of law or this Order (except that EPA may, instead, elect to continue the imposition of stipulated penalties pursuant to paragraph 31.C, above). Failure to comply with this Order, or any portion hereof without sufficient cause may subject Respondents to an action under Section 107(c)(3) of CERCLA, 42 U.S.C. §9607(c)(3), for punitive damages in the amount of three times the total of all costs incurred by the government as a result of Respondents' failure to take proper action.

32. General Provisions

A. This Order shall be effective on the next working day following the date on which it is signed by the Regional Administrator.

B. All work conducted pursuant to this Order shall be performed in accordance with prevailing professional standards.

C. All actions performed by Respondents in implementing this Order shall be in compliance with all applicable federal, state, and local laws and regulations, including but not limited to 40 CFR, Part 300. Respondents shall be responsible for obtaining all necessary permits, licenses and other authorizations.

D. The Work Plan, Site Operations Plan, the RI Report and the Draft FS Report, in addition to all other reports, work plans and other writings required under the terms of this Order, upon approval by EPA, are incorporated into this Order.

E. Neither the United States Government nor any agency thereof shall be liable for any injuries or damages to persons or property resulting from acts or omissions of Respondents, their officers, directors, employees, agents, servants, receivers, trustees, successors, or assignees, or of any persons, including but not limited to firms, corporations, subsidiaries, contractors or consultants, in carrying out activities pursuant to this Order, nor shall the United States Government or any agency thereof be held out as a party to any contract entered into by Respondents in carrying out activities pursuant to this Order.

F. This Order shall apply to and be binding upon Respondents and Respondents' heirs, successors, and assigns.

G. Nothing contained in this Order shall affect any right, claim, interest, defense, or cause of action of any party hereto with respect to third parties.

H. Respondents' activities under this Order shall be performed within the time limits set forth herein unless performance is delayed by events which constitute a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond Respondents' control. Increased costs or changed financial circumstances shall not be considered a force majeure. Respondents shall verbally notify

EPA's designated representative and EPA's project coordinator as soon as possible following Respondents' awareness that circumstances constituting a force majeure have occurred or are likely to occur. If the designated representative or the project coordinator cannot be contacted, Respondents shall attempt to leave a message at the office of each person who could not be contacted. In addition, Respondents shall notify EPA in writing, over the signature of a responsible official of Respondents, as soon as possible but not later than ten (10) days after Respondents become aware that circumstances constituting a force majeure have occurred. Respondents shall have the burden of proving that any failure to comply with any requirement of this Order is excused by this paragraph. Respondents' failure to timely notify EPA as required by this subparagraph shall render the remaining provisions of this subparagraph null and void insofar as they may entitle Respondents to an extension of time, (unless EPA in fact had actual knowledge of such circumstances).

I. Respondents shall use their best efforts to avoid or minimize any delay or prevention of performance of their obligations under this Order. Respondents shall provide written notification to EPA of any circumstances which have caused or which Respondents believe are likely to cause a delay of performance. Such written notice: 1) shall be provided as soon as possible, but not later than ten (10) days after the date when Respondents knew or should have known of the occurrence of such circumstances; 2) shall be accompanied by all available documentation, including but not limited to third-party correspondence; and 3) shall include a) a description of the circumstances causing or potentially causing the delay; b) the actions (including pertinent dates) that Respondents have taken and/or plans to take to minimize any delay; and c) the date by which or time period within which Respondents propose to complete delayed activities. Such notification does not relieve the Respondents of any obligation under this Order.

J. Nothing contained in this Order shall affect any right, claim, interest, defense, or cause of action of any party hereto with respect to third parties. Nothing in this Order constitutes a decision on pre-authorization of funds under Section 111(a)(2) of CERCLA.

K. Nothing in this Order shall be construed as any determination by EPA or by any of the parties consenting hereto as to the appropriate degree of relative contribution among them in the performance of this Order, or with respect to any other matter arising out of the operations of the facility, or with respect to any indemnity obligations as between Owner/Operator Respondents and other Respondents, or as a waiver of any rights of contribution and indemnity as among the parties.

33. Termination and Satisfaction

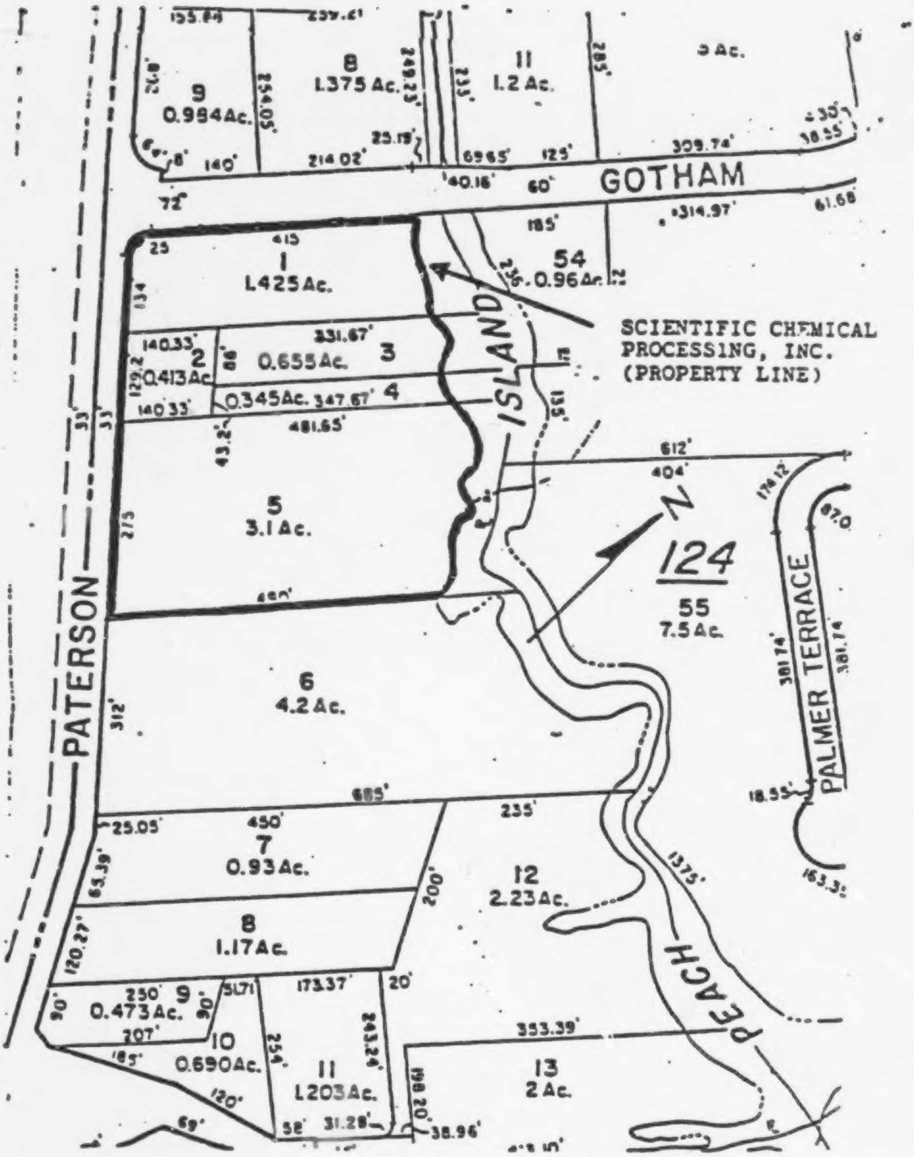
The provisions of this Order shall be deemed satisfied upon the Respondents' receipt of written notice from EPA that the Respondents have demonstrated, to the satisfaction of EPA, that all of the terms of this Order, including any additional tasks which EPA has determined to be necessary (refer to paragraph 26.E., above), have been completed.

IT IS SO ORDERED:

U.S. ENVIRONMENTAL PROTECTION AGENCY

CHRISTOPHER J. DAGGETT
Regional Administrator
U.S. Environmental Protection Agency
Region II

September 30, 1985
DATE


PATERSON
GOTHAM
ISLAND
PEACH
PALMER TERRACE
SCIENTIFIC CHEMICAL
PROCESSING, INC.
(PROPERTY LINE)
N
124
1
1.425 Ac.
2
0.413 Ac.
3
0.655 Ac.
4
0.345 Ac.
5
3.1 Ac.
6
4.2 Ac.
7
0.93 Ac.
8
1.17 Ac.
9
0.473 Ac.
10
0.690 Ac.
11
1.203 Ac.
12
2.23 Ac.
13
2 Ac.
54
0.96 Ac.
55
7.5 Ac.
9
0.984 Ac.
8
1.375 Ac.
11
1.2 Ac.

Map not to scale
Source: NJDEP,
Figure 1 SCP Site at Paterson Plank Road and Gotham Road, Carlstadt Township, Bergen County, New Jersey

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

-----------------------------------x

IN THE MATTER OF

ALFA INK & CHEMICAL CORPORATION
ALL PURPOSE ROLL LEAF CORPORATION
ALMO ANTI-POLLUTION SERVICES
MACK BARNES
CAPITOL RECORDS, INC.
CHEMICAL POLLUTION CONTROL CORP.
CHROMALLOY CORP.
COMET CHEMICAL CO., INC.
CONESTOGA FUELS, INC.
CONTINENTAL GROUP, INC.
DELAWARE CONTAINER CO., INC.
GENERAL FOODS CORP.
GILBERT FREEMAN CO.
HAZARDOUS WASTE DISPOSAL, INC.
HEXCEL FINE ORGANICS, INC.
INMAR ASSOCIATES
JONAS WASTE REMOVAL
KIRKER CHEMICAL CO.
MATLACK, INC.
MATTIACE INDUSTRIAL SALES CO., INC.
MCKENZIE CHEMICAL WORKS, INC.
MONROE CHEMICAL CO.
OLIN CORPORATION
PHILLIP A. HUNT CHEMICAL CORP.
RANDOLPH PRODUCTS CO.
RECLAMATION RESOURCES, INC.
S & W WASTE, INC.
SOUTHLAND CHEMICAL CORPORATION
SYNKOTE PAINT CO.
SYNTEX BEAUTY CARE, INC.
VIKING WIRE CORP.

Respondents.

Index No. II CERCLA-60102

Proceeding Under Section 106(a)
of the Comprehensive Environmental Response, Compensation
and Liability Act, 42 U.S.C.
§9606(a)

-----------------------------------x

JURISDICTION

The following Administrative Order is issued to the above-captioned Respondents pursuant to the authority vested in the President of the United States by §106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. §9606(a), which authority was delegated to the Administrator of the United States Environmental Protection Agency (EPA) by Executive Order 12316, 46 Fed. Reg. 42237 (August 20, 1981) and duly redelegated to the Regional Administrator, EPA Region II on March 17, 1983. Pursuant to Section 106(a) of CERCLA, the State of New Jersey Department of Environmental Protection (NJDEP) has been notified of this Order.

DEFINITIONS

1. As used in this Order, unless otherwise clearly required by context, the following terms shall have the following meanings:

A. Respondents shall include jointly and severally, all individuals, companies, partnerships, or other business entities listed in the caption of this Order.

B. Generator Respondents shall include all Respondents with the exception of Mack Barnes, Inmar Associates, and Transporter Respondents.

C. Transporter Respondents shall include any Respondents who accepted hazardous substances for transport by air, rail, highway, water, etc. to the facility.

D. Owner/Operator Respondents shall include Inmar Associates and Mack Barnes.

E. Facility shall mean real property located at 216 Paterson Plank Road, Carlstadt, New Jersey and occupying Block 124, Lots 1 through 5 on the tax map of Bergen County, Township of Carlstadt.

F. CERCLA shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §9601 *et seq.*, P.L. 96-510.

G. Hazardous Substance shall mean any substance that falls within the definition of "Hazardous Substance" as defined in Section 101(14) of CERCLA, 42 U.S.C. §9601(14).

H. Designated Coordinator shall mean the person designated by Respondents which person shall be charged with the duty of, at all times, being knowledgeable about and overseeing the progress of all work performed pursuant to this Order and EPA

Administrative Order, Index No. II-CERCLA 50114.

I. National Contingency Plan (NCP) shall mean the National Oil and Hazardous Substances Contingency Plan promulgated by EPA pursuant to §105 of CERCLA, 42 U.S.C. §9605, and codified at 40 CFR Part 300, and all amendments or modifications thereto.

J. Remedial Action shall have the meaning set forth in the portion of the NCP found at 40 CFR §300.6.

FINDINGS

2. Each Respondent is a person, as defined in §101(21) of CERCLA, 42 U.S.C §9601(21), and a responsible party under Section 107(a) of CERCLA, 42 U.S.C. §9607(a). Each Respondent is jointly and severally liable, with each and every other Respondent, for carrying out the provisions of this Order.

3. The hazardous substances referred to in this Order shall mean any substances meeting the definition of "Hazardous Substance" as defined in §101(14) of CERCLA, 42 U.S.C. §9601(14).

4. Inmar Associates, Inc. is a corporation organized under the laws of the State of New Jersey and doing business in the State of New Jersey, which owns a parcel of property in Carlstadt, Bergen County, New Jersey. The property is bordered on the north by Peach Island Creek, a surface water of the United States, on the south by Paterson Plank Road, on the west by Gotham Parkway, and on the east by Carolina Trucking Company ("the Inmar Property"). The property consists of Block 124, Lots 1 through 5, Township of Carlstadt.

5. During the period commencing in or about 1970 and continuing until in or about 1980, the Inmar property was leased by Scientific Chemical Processing, Inc. (a corporation organized under the laws of the State of New Jersey), which operated on the property a waste collection, transportation, treatment and disposal service. The property leased by Inmar Associates, Inc. to Scientific Chemical Processing, Inc. constitutes a "Facility," as that term is defined in §101(9) of CERCLA, 42 U.S.C. §9601(9). The property shall hereinafter be referred to as "the site" or "the facility."

6. During the period of its operation, Scientific Chemical Processing, Inc. accepted, transported, transferred, stored, reprocessed, reclaimed, treated, blended, and disposed of certain materials which contained hazardous substances.

7. The Owner/Operator Respondents to this Order owned the facility and/or operated businesses at the facility which engaged in the transfer, storage, reprocessing, reclamation, reuse, blending, treatment, and/or the disposal of hazardous

substances.

8. The Generator Respondents to this Order made arrangements with transporters and/or Scientific Chemical Processing, Inc. for the transport, storage, treatment or disposal of hazardous substances, which include certain substances chemically identical to or similar to those released and/or in danger of being released from the facility to the environment.

9. The Transporter Respondents to this Order accepted hazardous substances for transport to the facility.

10. Based upon inspections performed at the site by the NJDEP and EPA between 1977 and 1984, sampling and chemical analyses, and environmental surveys conducted at the site, EPA has determined that the material which has been released, or threatens to be released, into the environment from spills and/or leaking containers at the site, contains hazardous substances, and that surface water, ground water, air and soil at the site have been or threaten to be contaminated. Specifically, analyses of waste samples performed during 1979 and a NJDEP site inspection report dated October 10, 1980 (which cites a June 1980 inventory of waste at the site) indicate the following wastes and/or constituents of waste were released or threatened to be released from the site: PCB-containing materials, acids, benzene, chloroform, trichloroethylene, toluene, styrene, xylenes, carbon tetrachloride, chloroethane, ethylbenzene, ethylacetate, isopropanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, phenolic resin, tetrachloroethane, tetrachloroethlene, trichloroethane, arsenic, mixed solvents, paint sludge and solvent sludge.

11. Based on the aforementioned inspections, sampling and chemical analyses, and environmental surveys, the New Jersey Supreme Court in October 1980 refused to stay the effectiveness of NJDEP's order that Scientific Chemical Processing, Inc. cease operations.

12. At that time, there were approximately 56 tanks and/or tank trailers and 50 drums containing hazardous substances at the site. According to an Inventory prepared by Scientific Chemical Processing, Inc., in December 1980, various wastes containing hazardous substances still remained at the site, including, but not limited to, solvents and thinners, etching solutions, methanol/phosphoric acid solutions, sodium sulfate solutions, and fuel residues. During 1984, many of the aforesaid tanks/tank trailers and drums were removed from the site by Inmar Associates, under NJDEP supervision. NJDEP reported that many were severely discolored, indicating leaks, and some of the tanks had makeshift patches.

13. Presently, there are 4 tanks and 1 tank trailer remaining at the site. Lab analyses performed for Inmar Associates indicate that the liquids, solids, and/or sludges in these

tanks/tank trailer contain PCBs; these analyses showed PCB concentrations ranging as high as 91,000 parts per million (ppm) in one sample of sludge. One of the tanks shows evidence of leakage, and another tank has a half-inch wide section cut from its circumference at a height of approximately four feet above the ground. The lids on both of these tanks currently are open to the environment, enabling rainwater to come in contact with the PCB-containing liquids, solids, and sludges. There is an inadequate containment system in place around the tanks.

14. EPA has determined that the substances listed in paragraphs 10, 12, and 13 have been shown to cause a variety of adverse effects to exposed populations. For example, PCBs have been demonstrated to cause cancer in animals and are suspected human carcinogens. EPA has determined that PCBs can cause liver damage, and dermatological abnormalities such as chloracne and hyperpigmentation. PCBs bioaccumulate, i.e., are retained in human and animal tissues at concentrations in excess of exposure levels. PCBs are extremely stable and persistent in the environment. Benzene exposure has been closely linked to leukemia in humans, and may also be mutagenic. Carbon tetrachloride, chloroform, and tetrachloroethylene cause cancer in animals, are suspected human carcinogens, and can cause liver and kidney damage. Ethylbenzene and xylenes can adversely effect the central nervous system, causing dizziness, unconsciousness, and death due to respiratory failure.

15. The presence of such hazardous substances at the site, and their past and/or potential future migration to surrounding soils, surface water, and groundwater, constitute an actual release or threatened release from the facility within the meaning of Section 101(22) of CERCLA, 42 U.S.C. §6901 (22).

16. Based on present information, EPA has determined that:

(a) The site is located on a filled-in section of the Hackensack Meadows. The fill, which consists of organic silt, is underlain by clay deposits interspersed with beds of sand and gravel. These clay deposits, and sand and gravel beds are discontinuous and may not comprise a major confining unit. The bedrock at the site is the Brunswick Formation, which underlies the clay, sand and gravel deposits at depths ranging from approximately 40 to 120 feet in the vicinity of the site.

(b) The two major aquifers in the area of the site are the Brunswick Formation and the Quarternary age stratified drift located along river channels. The Brunswick Formation yields water from fractures in the rock. Fracturing decreases with depth, and most of the groundwater is produced by the upper, highly fractured part of the formation.

(c) There are approximately 21,000 people living within three miles of the site. The primary water supply for this population is groundwater. The nearest well is located about 4000 feet from the site.

(d) The hydrogeologic conditions described in paragraphs 17(a) and (b) constitute conditions which may enhance the vertical transmission of hazardous substances in the groundwater. The groundwater in the area is used by the local populations for drinking purposes.

17. Peach Island Creek borders the site on the north. This creek has been designated as Freshwater-2 (FW-2) by NJDEP. FW-2 criteria state that such waters should "be suitable for maintenance, migration, and propagation of the natural ecosystem and support biota." Peach Island Creek joins Berrys Creek Canal approximately 1500 feet northwest of the site. Berrys Creek Canal joins the Hackensack River approximately 2 miles downstream of its confluence with Peach Island Creek. According to NJDEP, designated uses for Berrys Creek and the Hackensack River include "secondary contact recreation; the maintenance and migration of fish populations; the migration of diadromous fish; the maintenance of wildlife and other reasonable uses." The Hackensack River enters the Atlantic Ocean in the Newark Bay approximately 7 miles south of the site. Contamination of Peach Island Creek would pose a threat of contamination to these other navigable waters.

18. Visual observations by EPA and NJDEP of discoloration of and leachate seepage into Peach Island Creek noted during various site inspections indicate possible contamination of surface water, creek sediment, soil, and groundwater.

19. The site is on the National Priorities List ("NPL"), 40 CFR Part 300, Appendix B, which has been issued pursuant to Section 105(8)(b) of CERCLA, 42 U.S.C. §9605(8)(b).

20. In order to determine the nature and extent of the release and threatened release at the site, and to select an appropriate remedial alternative, a remedial investigation and feasibility study (RI/FS) must be conducted in conformance with the National Contingency Plan, 40 CFR Part 300. The Work Plan submitted pursuant to paragraph 24, below, which will be appended hereto and labelled Appendix I upon approval by EPA, has been prepared by Respondents for use in performing the RI/FS.

21. On September 30, 1985 EPA issued an Administrative Consent Order, Index No. II-CERCLA-50114, to 108 other Respondents (hereinafter "the Consenting Parties"), who are also responsible parties with respect to the site. Respondents hereto have been given an opportunity to discuss with EPA the basis for issuance of this Order and its terms.

DETERMINATION BY THE REGIONAL ADMINISTRATOR

22. Based on the above Findings, and the entirety of the administrative record, and pursuant to Section 106(a) of CERCLA, the Regional Administrator has determined that the release and threatened release of one or more hazardous substances from the facility may present an imminent and substantial endangerment to the public health, welfare and/or the environment.

ORDER

23. Based on the foregoing, it is hereby ordered that the Respondents shall undertake a remedial investigation and feasibility study at the facility in accordance with the requirements specified below. All activities performed pursuant to this Order shall be completed as soon as practicable even though time periods for their completion may be specified herein or in the Work Plan. In carrying out any and all activities required of Respondents under the terms of this Order, Respondents shall fully participate in the efforts of, and cooperate with, the Consenting Parties who are Respondents to the above-referenced Consent Order, Index No. II-CERCLA-50114.

24. Remedial Investigation/Feasibility Study Work Plan

A. The Consenting Parties have submitted to EPA a work plan for the performance of a Remedial Investigation/Feasibility Study ("RI/FS Work Plan"). EPA has reviewed the RI/FS Work Plan for consistency with the National Contingency Plan, 40 CFR Part 300, EPA's "Guidance on Remedial Investigations Under CERCLA, May, 1985," and EPA's "Guidance on Feasibility Studies Under CERCLA, April, 1985." EPA has commented thereon in writing to the Consenting Parties, and the Consenting Parties have had an opportunity to meet with EPA and discuss such comments before they became final. The Consenting Parties have amended the RI/FS Work Plan as required by those comments or as otherwise approved by EPA and have submitted the amended RI/FS Work Plan to EPA. EPA will make the final determination as to the sufficiency of the RI/FS Work Plan submitted by Respondents. At such time as EPA determines that the RI/FS Work Plan is acceptable, EPA will transmit to the Consenting Parties a written statement to that effect, and the RI/FS Work Plan will be appended to this Order and labelled Appendix I.

25. Remedial Investigation

A. According to the schedule presented in the EPA-approved RI/FS Work Plan ("the Work Plan") attached as Appendix I, Respondents shall submit to EPA for review and approval a detailed Site Operations Plan for the performance of a Remedial Investigation (RI) in conformance with the National Contingency Plan, EPA's "Guidance on Remedial Investigations Under CERCLA, May 1985," and the Work Plan of this Order. The Site Operations Plan shall fully describe how those activities called for in the

Work Plan will be implemented, and shall include but should not necessarily be limited to the items in Task 2, Section 2.4.2. (Site Operations Plan) of the Work Plan and items i through x, below:

i. a detailed map of the site depicting all sampling locations;

ii. the number and types of samples to be obtained at each sampling location;

iii. the overall management plan, including identification of contractors and subcontractors and their respective responsibilities for performance of the specific tasks set forth in Appendix I;

iv. a detailed schedule for performance of the specific tasks;

v. a Quality Assurance/Quality Control (QA/QC) plan for all investigations to be performed [the QA/QC plan shall be completed in accordance with Section 10 of the publication, Test Methods for Evaluating Solid Waste (SW-846) and the guidance appended hereto and labelled Appendix II];

vi. provision for completing a QA/QC evaluation of laboratory data (to validate the data) within 2 weeks of completion of laboratory analyses;

vii. a description of the chain of custody procedures to be followed, which shall conform to those set forth in Section 1.3 of SW-846;

viii. a Health and Safety plan;

ix. a Contingency plan for conducting site activities; and

x. the curriculum vitae of all professionals expected to perform the RI, and a description of the responsibilities and the anticipated levels of effort of each such professional.

B. EPA will review the Site Operations Plan and comment thereon in writing. EPA will address its comments to the conformance of the Site Operations Plan with sound management, engineering and scientific practices; technological feasibility; established environmental monitoring procedures; and consistency with the Work Plan. EPA will include in its comments an explanation of the basis of its comments. Within 5 business days of receipt of EPA's comments, Respondents will have an opportunity to meet with EPA to discuss such comments before they become final. Within 7 days of Respondents' receipt of the written final EPA comments, Respondents shall amend the Site Operations

Plan as required by those comments or as otherwise approved by EPA and submit the modified document to EPA.

C. EPA will make the final determination as to the sufficiency of the Site Operations Plan. At such time as EPA determines that the SOP is acceptable and in conformance with the NCP, EPA will transmit to Respondents a written statement to that effect.

D. Respondents shall perform the RI in conformance with the approved SOP and the Work Plan pursuant to the schedule set forth in the Work Plan. Respondents shall complete all activities specified therein and shall submit to EPA for review and approval a report detailing the results of the remedial investigation ("Preliminary RI Report").

E. EPA will review the Preliminary RI Report and comment thereon in writing; EPA will include an explanation of the basis of its comments. Within 5 business days of receipt of EPA's comments, Respondents will have an opportunity to meet with EPA to discuss such comments before they become final. Within 30 days of the receipt of such written final EPA comments, Respondents shall amend the said Report as required by those comments or as otherwise agreed upon by EPA, and shall promptly submit the amended report to EPA ("the RI Report"). EPA may, if necessary to accomplish the goals of the RI/FS as stated in the approved Work Plan, require the performance of additional investigatory work consistent with the provisions of the National Contingeny Plan and in conformance with a schedule to be set forth by EPA.

F. EPA will make the final determination as to the sufficiency of the RI Report and any additional studies. At such time as EPA determines that the RI Report is acceptable and in conformance with the NCP, EPA will transmit to Respondents a written statement to that effect.

26. Feasibility Study

A. Respondents shall perform a Feasibility Study in conformance with the following: National Contingency Plan, 40 CFR Part 300 (including 40 CFR 300.68(a) through (j)); EPA approved Work Plan (Appendix I), Section 3.0, Tasks 7-12; and EPA's "Guidance on Feasibility Studies Under CERCLA, April 1985."

B. Respondents shall perform the Feasibility Study (FS) in conformance with the Work Plan pursuant to the schedule set forth in the Work Plan. Respondents shall submit to EPA for review a Preliminary Feasibility Study Report which shall include a recommended remedial alternative. EPA will review and comment on the Preliminary FS Report.

C. Within 15 days of receipt of written final EPA comments on the Preliminary FS Report, Respondents shall modify that report as may be necessary to conform with such comments and submit the modified report to EPA for approval, and/or shall initiate such additional engineering evaluations as EPA finds necessary, in accordance with a schedule set forth by EPA. With the Preliminary FS Report, as amended, Respondents also shall submit a conceptual design for the recommended remedial action and the design shall conform to a format acceptable to EPA. The Preliminary FS Report, as amended, and the conceptual design for the recommended remedial action shall constitute the "Draft FS Report" for publication pursuant to paragraph 27.E., below.

D. EPA will make the final determination as to the sufficiency of the Draft FS Report submitted by Respondents. At such time as EPA determines that the Draft FS Report is sufficient, and acceptable for publication pursuant to Paragraph 26.E., below, EPA will transmit to Respondents a written statement to that effect.

E. Following submittal of the Draft FS Report, EPA will announce the availability of both the RI Report and the Draft FS Report to the public for review and comment. Following the public comment period (which may include both written and oral comments), EPA will determine if the Reports should be modified or accepted as submitted, and will so notify Respondents in writing. Within 5 business days of EPA's written determination, Respondents will have an opportunity to meet with EPA to discuss such modifications. Unless otherwise approved by EPA, within 30 days of receipt of EPA's written determination that either the RI Report or the Draft FS Report should be modified, Respondents shall modify either or both of the reports (which may, *inter alia*, entail a change in the recommended remedial alternative) as directed by EPA or as otherwise approved by EPA, and submit the modified document(s) to EPA. Should EPA require any modification(s), Respondents reserve their right to comment on, or disagree with these modifications. Respondents' comments on any EPA modification(s) shall be set forth in footnotes in or an appendix to the modified document. EPA regulations, policy and guidance in effect at the time such public comment period is initiated shall govern the procedures to be followed. EPA will make the final determination in any dispute regarding the sufficiency of the RI Report and the FS Report.

F. The Final FS Report shall not select a remedial alternative. EPA will make the final selection of the remedial alternative(s) to be implemented.

27. *Sampling and Reporting*

A. Upon request by EPA, Respondents shall provide EPA or its designated representatives with a reasonable number of duplicate and/or split samples of any samples collected in furtherance of work performed in accordance with this Order.

B. The Respondents shall provide monthly written progress reports to EPA. At a minimum, these progress reports shall: (1) describe all actions and activities undertaken toward achieving compliance with this Order, and (2) include all plans and procedures completed subsequent to EPA approval of the RI/FS Work Plan, during the past month as well as such actions and plans which are scheduled for the next month. These reports are to be submitted to EPA by the tenth day of each month following the effective date of this Order.

C. Upon request by EPA, all data and information, including raw sampling and other monitoring data, generated pursuant to this Order by Respondents or on behalf of Respondents, shall immediately be made available to EPA or its designated representatives.

D. Respondents shall give EPA four (4) business days advance notice of the following expected activities under this Order: all monitoring well activities, including but not limited to drilling, installation and testing, and all on-site and off-site sampling activities.

E. EPA and the Respondents agree that each shall preserve, during the pendency of this Order and for a minimum of six (6) years after its termination, all data, records and documents in their possession or in the possession of their divisions, employees, agents, accountants, contractors, or attorneys, concerning the implementation of work under this Order, despite any document retention policy to the contrary. No data, information, or records shall be destroyed for six years after the termination of work under this Order without either the express written approval of EPA, or a written offer by Respondents to provide such material to EPA followed by EPA's written rejection of that offer. After this six year period, the Respondents shall notify EPA within 30 days prior to the destruction of any such documents. Upon request by EPA, the Respondents shall make available to EPA such records or copies of any such records unless otherwise privileged under law.

F. All records prepared or compiled by Respondents and delivered to EPA in the course of implementing this Order shall be available to the public unless identified as confidential by a Respondent in conformance with 40 CFR Part 2. Records so identified shall be treated as confidential only in accordance with the applicable confidentiality regulations. Sampling and other monitoring data, and hydrological and geological information, may not be considered confidential. Furthermore, it is understood by the parties that EPA may release all such records to the NJDEP.

G. The original and nine copies of all correspondence, reports, work plans and other writings required under the terms of this Order to be submitted to EPA shall be sent by certified mail, return receipt requested to:

Chief, Site Investigation and Compliance Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

Attention: SCP-Carlstadt Project Officer

One copy of all such writings shall be transmitted by certified mail, return receipt requested to:

Chief, Superfund Branch
Office of Regional Counsel
U.S. Environmental Protection Agency
Room 437
26 Federal Plaza
New York New York 10278

Attention: SCP-Carlstadt Site Attorney

28. EPA Communications and Decisions

A. Written communications from EPA to Respondents will be sent by certified mail, return receipt requested to:

Respondents' Facility Coordinator
(address to be determined)

Thomas M. Armstrong, Counsel
Corporate Environmental Programs
General Electric Company
3135 Easton Turnpike-W1A
Fairfield, CT 06431.

B. As appropriate during the course of implementation of the remedial actions under this Order, Respondents or their consultants or contractors, acting through the Facility Coordinator, may confer with the EPA concerning those actions. Based upon new circumstances or new information not in the possession of EPA on the date of this Order, the Facility Coordinator may request, in writing to EPA, approval of a modification of the EPA-approved Work Plan. If approved by the EPA, such modifications shall be implemented immediately by Respondents.

C. All decisions of EPA under this Order, including approvals; disapprovals; grants or denials of requests for extensions of time; and requests for modifications of reports, work plans, specifications, schedules and other work outputs will be communicated in writing to Respondents by the Chief, Site Investigation and Compliance Branch, U.S. Environmental Protection

Agency, 26 Federal Plaza, New York, New York 10278.

D. No informal advice, guidance, suggestions or comments by EPA or NJDEP regarding reports, plans, specifications, schedules or any other writings submitted by Respondents shall be construed as relieving Respondents of their obligation to obtain such formal approvals as may be required by this Order. However, oral approvals may be obtained for minor matters if they are confirmed in writing within 2 business days.

29. Respondents' Facility Coordinator and EPA Inspection Authority

A. Respondents, together with the Consenting Parties to Administrative Order Index No. II-CERCLA-50114, shall provide EPA with the name, title, address, phone number and qualifications of their designated Facility Coordinator, who shall be responsible for oversight of the implementation of this Order, including all activities required herein. The Facility Coordinator shall have technical expertise sufficient to adequately oversee all aspects of the work contemplated by this Order. All correspondence and other writings from EPA to Respondents shall be made available to the Facility Coordinator. Counsel for Respondents shall not be eligible to be Facility Coordinator. Respondents shall have the right to change their Facility Coordinator at any time. However, Respondents shall notify EPA in writing at least five (5) working days prior to any such change. If such advance notice is not feasible, notice shall be given by the best means and as far in advance as possible under the circumstances.

B. EPA and EPA's representatives, including but not limited to their employees, agents, contractors and consultants, shall have authority to observe the work being carried out pursuant to this Order, for the purposes of inspecting and observing Respondents' progress in implementing the requirements of this Order, or for the purpose of verifying the data submitted to EPA by Respondents concerning such implementation. To the maximum extent possible under the law, Respondents shall forthwith honor all requests by EPA or its representatives to observe the work being carried out pursuant to this Order and also, at reasonable times, shall permit such persons to inspect and copy all writings, including all data, in any way pertaining to work undertaken pursuant to this Order. Respondents shall not be required to permit anyone who is not bound by EPA's confidentiality regulations to inspect or copy any writing which is entitled to confidential treatment under Title 40 CFR Part 2. Notwithstanding the above, EPA hereby retains all its inspection authority under CERCLA and the Resource Conservation and Recovery Act, 42 U.S.C. §6901 _et seq_. NJDEP and its designated representatives, as well as any EPA contractor and its representatives, shall be eligible to be designated representatives of EPA under this paragraph.

C. Respondents shall not interfere with EPA access to the Site or any other premises upon which work under this Order may be performed. Further, to the extent practicable and within their rights and abilities to do so, (including bringing the terms of this paragraph to the attention of their selected contractors) Respondents shall support and assist EPA in obtaining access to the site and other premises at which work in furtherance of the requirements of this Order is carried out, and shall similarly support and assist EPA in exercising its inspection and other authority under this provision including, but not limited to review and copying of records.

30. Enforcement Actions

A. In the event that Respondents fail to adhere to any requirement of this Order; or, notwithstanding compliance with the terms of this Order, upon the occurrence or discovery of a situation as to which EPA would be empowered to take any further response action(s), including but not limited to the prevention or abatement of an imminent and substantial endangerment to the public health, welfare or the environment arising from conditions at the facility; or under any other circumstances authorized by law and not inconsistent with terms of this Order, EPA reserves the right to, after notice to Respondents and other identified potentially responsible parties, institute federally-funded response activities and subsequently pursue cost recovery actions available, and/or EPA may issue orders to Respondents pursuant to available statutory authority. Respondents do not hereby consent to any future action taken by EPA under this paragraph.

B. EPA reserves its right to bring an action against Respondents pursuant to Section 107 of CERCLA, 42 U.S.C. §9607, for recovery of any costs incurred in oversight of Respondents' implementation of this Order, and any other costs incurred by EPA in connection with investigative or response activities at the Site (to include all costs associated with EPA's performance of the RI/FS or any part thereof, in the event that Respondents fail to complete the RI/FS in conformance with the requirements of this Order).

C. Violation of this Order as a result of Respondents' failure to comply with any provision herein, including but not limited to any failure to comply with any EPA-approved work plan prepared in compliance herewith, shall be enforceable pursuant to §§106(b) and 113(b) of CERCLA, 42 U.S.C. §§9606(b) and 9613(b). Respondents may also be subject to civil penalties of up to five thousand ($5,000) dollars per day, cost recovery, and punative damages of up to three (3) times the amount of any costs incurred by EPA under this Order as provided in §§106(b), 107(a), and 107(c)(3) of CERCLA, 42 U.S.C. §§9606(b), 9607(a), 9607(c)(3), for failure to comply with the terms of this Order. Nothing herein shall preclude EPA from taking any additional enforcement actions, and/or additional actions as it may deem necessary for any purpose, including the prevention or abatement of an imminent and substantial danger to the public health, welfare, or the environment arising from conditions at the Facility and recovery of costs thereof; nor shall anything herein preclude DEP from taking legal action pursuant to State law.

31. General Provisions

A. This Order shall be effective on the fourth working day following the date on which it is received by Respondents.

B. All work conducted pursuant to this Order shall be performed in accordance with prevailing professional standards.

C. All actions performed by Respondents in implementing this Order shall be in compliance with all applicable federal, state, and local laws and regulations, including but not limited to 40 CFR, Part 300. Respondents shall be responsible for obtaining all necessary permits, licenses and other authorizations.

D. The Work Plan, Site Operations Plan, the RI Report and the Draft FS Report, in addition to all other reports, work plans and other writings required under the terms of this Order, upon approval by EPA, are incorporated into this Order.

E. Neither the United States Government nor any agency thereof shall be liable for any injuries or damages to persons or property resulting from acts or omissions of Respondents, their officers, directors, employees, agents, servants, receivers, trustees, successors, or assignees, or of any persons, including but not limited to firms, corporations, subsidiaries, contractors or consultants, in carrying out activities pursuant to this Order, nor shall the United States Governments or any agency thereof be held out as a party to any contract entered into by Respondents in carrying out activities pursuant to this Order.

F. This Order shall apply to and be binding upon Respondents and Respondents' heirs, successors, and assigns.

G. Respondents shall use their best efforts to avoid or minimize any delay or prevention of performance of their obligations under this Order. Respondents shall provide written notification to EPA of any circumstances which have caused or which Respondents believe are likely to cause a delay of performance. Such written notice: 1) shall be provided as soon as possible, but not later than ten (10) days after the date when Respondents knew or should have known of the occurrence of such circumstances; 2) shall be accompanied by all available documentation, including but not limited to third-party correspondence; and 3) shall include a) a description of the circumstances causing or potentially causing the delay; b) the actions (including pertinent dates) that Respondents have taken and/or plan to take to minimize any delay; and c) the date by which or time period within which Respondents propose to complete delayed activities. Such notification does not relieve the Respondents of any obligation under this Order.

H. Nothing in this Order constitutes a decision on preauthorization of funds under Section 111(a)(2) of CERCLA.

I. Not later than three days from the date this Order is received by Respondents, Respondents, or any of them, may confer with EPA to discuss this Order, including its applicability, the Findings upon which the Order is based, the appropriateness of any action or activity required to be undertaken herein, or any other issues or contentions directly relevant to the issuance of this Order which Respondents, or any of them, may have regarding this Order. Such conference is not, and shall not be deemed to be, an adversary proceeding or part of a proceeding to challenge this Order, and no official stenographic record of such proceeding shall be kept. Any Respondent requesting a conference under this paragraph may appear at such conference in person or by an attorney or other designated representative. In the event that EPA deems the number of requests for conferences by individual Respondents unmanageable, EPA reserves the right to limit the number of such conferences to representatives of groups or committees of Respondents, consistent with the preservation of the rights of Respondents to be heard. Any request for a conference shall be made to Ms. Kathleen Chojnowski, Attorney, Superfund Branch, Office of Regional Counsel, United States Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York, 10278, telephone (212) 264-2211.

IT IS SO ORDERED:

U.S. ENVIRONMENTAL PROTECTION AGENCY

CHRISTOPHER J. DAGGETT
Regional Administrator
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

cc
DATE

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
Region II
26 Federal Plaza
New York, New York 10278

IN THE MATTER OF :

ONE RIVER ROAD, EDGEWATER, :
NEW JERSEY:
:
JAMES FROLA, GEORGE KNOTT,
RUSSELL MAHLER, CHARLES STRAWAY, :
and ALBERT VON DOHLN,

Index No. II-CERCLA-60101

:
Individuals, and
:

AAXON INDUSTRIAL, INC. :
ALCAN ALUMINUM CORPORATION
ALL COUNTY ENVIRONMENTAL :
AMERICAN PIPE & TANK
BORNE CHEMICAL CO., INC. :
BROOKSIDE APARTMENTS
BROWNING-FERRIS INDUSTRIES :
D. CALLEIA, INC., d/b/a
TANKS-A-LOT :
CHEMICAL MANAGEMENT, INC.
CONSOLIDATED RAIL CORPORATION :
CONTINENTAL CAN COMPANY, INC.
DEPALMA OIL COMPANY :
EASTERN OIL SERVICE
EXIDE CORPORATION :
FILMAR TANK & MACHINE COMPANY,
LTD. :
KEN'S MARINE SERVICE
LARRY'S WASTE OIL SERVICE :
LOEFFEL'S WASTE OIL SERVICE
LUZON OIL CO., INC. :
McALLISTER BROTHERS, INC.
MIDDLETOWN PUBLIC SCHOOL :
NED'S WASTE OIL SERVICE
ROBERT MORE WASTE OIL SERVICE :
NEW ENGLAND MARINE CONTRACTORS,
INC. :
NORTHEAST OIL SERVICE
PEABODY INTERNATIONAL CORP. :
PETROLEUM TANK CLEANING
POWER/MATE CORP. :

FINDINGS OF FACT, DETERMINATION AND ORDER

RA-MAR CORPORATION :
REFINE-MET INTERNATIONAL CO.,
as successor to AG-MET :
REFINING CO.
SARGE OIL CO. :
S & M WASTE OIL, INC.
STATE FAYETTE GARDENS :
STOKES MOLDED PRODUCTS
STUYVESANT FUEL SERVICE CORP. :
SUNRISE OIL CO.
TEXACO INC. :
THE LANDSDELL COMPANY
THE PREAKNESS HOSPITAL :
TOTAL RECOVERY, INC.
TURBO PRODUCTS INTERNATIONAL :
INCORPORATED and .
WITCO CHEMICAL CORPORATION, :

Respondents. :

Proceeding Pursuant to §106 :
of the Comprehensive Environmental
Response, Compensation :
and Liability Act, 42 U.S.C.
§9606 :

JURISDICTION

This Administrative Order (Order) is issued by the United States Environmental Protection Agency (EPA) pursuant to the authority vested in the President of the United States by §106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. §9606(a), which authority was delegated to the Administrator of EPA by Executive Order 12316, 46 Fed. Reg. 42237 (August 20, 1981), and duly redelegated to the Regional Administrator, EPA Region II on March 17, 1983. Pursuant to that authority, EPA hereby makes the following Findings and Determination and issues the following Order. Pursuant to §106(a) of CERCLA, the State of New Jersey Department of Environmental Protection (NJDEP) has been notified of this Order.

FINDINGS

1. Each Respondent is a person, as defined in §101(21) of CERCLA, 42 U.S.C. §9601(21), and is either an owner or operator of the facility which is the subject of this Order, a generator or transporter of hazardous substances disposed of and remaining at the facility which is the subject of this Order, or otherwise a potentially responsible party under Sections 107(a)(1), (2), (3) or (4) of CERCLA, 42 U.S.C. §§9607(a)(1), (2), (3) or (4).

2. The hazardous substances referred to in this Order shall mean any substances meeting the definition of "Hazardous Substance" as defined in §101(14) of CERCLA, 42 U.S.C. §9601(14).

3. The facility which is the subject matter of this Order (hereinafter, "the facility" or "the site"), which has come to be known variously as the "Quanta Resources" facility, the "One River Road" facility, or the "Edgewater Terminal", is located at One River Road, Edgewater, New Jersey. The property, located in the Borough of Edgewater, County of Bergen, comprises Block 95, Lots 1, 2, and 3, on the Tax Map of the Borough of Edgewater. The Hudson River forms the eastern boundary of the property, which lies at a point approximately parallel to West 93rd Street, Manhattan. It is further bordered by the Celotex Industrial Park property on the north, an industrial facility on the south, and a railroad right of way and River Road, a primary commercial thoroughfare, to the west.

4. The site is adjacent to commercial facilities which process, or are otherwise engaged in the handling of, food intended for human consumption. River Road carries a continual stream of both commercial and non-commercial vehicular traffic. A portion of the New Jersey Palisades, which rises 500 yards to the west of the property, contains residential housing, including several high-rise condominium residences. The segment of the Hudson River bordering the facility to the east carries both commercial and pleasure traffic throughout the year.

5. If certain of the hazardous substances stored at the site were to be released to the environment, under certain conditions (e.g., fire), winds traveling west over the property (in a direction opposite to the direction of prevailing winds at the site) could carry airborne emissions of hazardous substances from the property into the surrounding area. Winds traveling east over the property could carry airborne emissions off the site.

6. Beginning at some time in the 1930s, the Barrett Division of Allied Chemical Corporation (now Allied Corporation, hereinafter, "Allied") commenced operations at the site.

7. Allied conducted coal tar processing operations at the facility for several decades thereafter. In or about March 1974, Respondents JAMES FROLA (FROLA) and ALBERT VON DOHLN (VON DOHLN) purchased the facility from Allied.

8. In or about May 1977, Frola and Von Dohln leased the facility to E. R. P. Corporation (ERP). The lease specified that the property was to be utilized for the storage of oil and recycling of oil. At a time after May 1977, ERP assigned its lease to Edgewater Terminals, Inc., which, on or about July 29, 1980 re-assigned the lease to Quanta Resources Corporation (QRC). QRC was a wholly owned subsidiary of Quanta Holding Corp., which, in turn, was a wholly owned subsidiary of Waste Recovery, Inc. Waste Recovery, Inc. was a wholly owned subsidiary of A. G. Becker Paribas, Incorporated (formerly Warburg-Paribas-Becker, Inc.).

9. On or about August 6, 1980 QRC entered into an administrative consent order with the New Jersey Department of Environmental Protection (NJDEP). The consent order required QRC to perform environmental cleanup activities at the site and to operate thereafter only in conformance with enumerated State laws and regulations. Specifically, the activities which could be legally conducted at the site, and types of wastes which could be legally accepted by the operation at the facility, was limited to storage, reprocessing, reclaiming, and recovery of special wastes consisting of waste oil, oil emulsions, and oil sludges. Acceptance of polychlorinated

biphenyls (PCBs) was completely prohibited. The August 6, 1980 NJDEP order was superseded by another NJDEP consent order with Respondent QRC dated May 29, 1981 and a Temporary Operating Authorization (TOA) also dated May 29, 1981.

10. Hudson Oil Refining Corporation, Newtown Oil, Polar Industries, Inc., Casco Equipment Corporation and Oil Transfer Corporation offered to the public waste collection, transportation, and disposal services utilizing the tank capacity existing at the site.

11. The substances presently being released and/or posing a threat of release from the facility to the environment have been delivered to the facility, and/or may have been generated, by, or as a result of the arrangements made by, certain of the Respondents.

12. Analyses of samples taken from tanks at the facility on or about June 23, 1981 indicated the presence of PCBs in the liquids in those tanks at concentrations exceeding 50 parts per million. Storage of PCBs constituted a violation of the TOA.

13. At the direction of NJDEP, operations at the facility ceased on July 2, 1981. NJDEP issued a formal order of cessation of operations on October 12, 1981. Six days earlier, on October 6, 1981, QRC filed for reorganization pursuant to Chapter 11 of the Bankruptcy Code, 11 U.S.C. $101 et seq. On November 12, 1981 the Chapter 11 Petition was converted into a Chapter 7 liquidation.

14. The facility contains 61 (SIXTY-ONE) above-ground storage tanks with a storage capacity of approximately 9 million gallons, in addition to approximately 10 underground storage tanks with a capacity of roughly 40,000 gallons. It covers an area of about 15 acres, with a perimeter of approximately 22,000 linear feet. Large quantities of chemically contaminated waste oil, oil sludges, tar, asphalt, process water, and as yet uncharacterized liquid chemicals have been abandoned in tanks at the site. In addition to the bulk liquids stored at the site, about 50 drums containing oils, sludges, contaminated absorbent materials, debris, and uncharacterized materials are staged at primarily three locations within the facility.

15. As a result of the long period of active operations at the site, soils at the site have become contaminated with asphaltic materials and with oils containing hazardous substances and chemicals, some of which may have been released from their containments during spills which occurred at the facility after its cessation of operations.

16. Large deposits of tar and asphalt have been identified in the soils of that part of the facility nearest the Hudson River, and the surface of the shallow portion of the Hudson River which borders on the facility is continually covered with a thick layer of weathered oily sludge attributable, at least in part, to discharges and releases from the facility.

17. As of March 29, 1985, there existed at least 750,000 gallons of chemically contaminated oil within the tanks at the facility. Oil in many of the facility's tanks has been identified as contaminated with PCBs in concentrations from 50 to 260 ppm. Approximately 266,000 gallons of oil have been found to be contaminated with PCBs near or above the level of 50 ppm.

18. As of March 29, 1985, a number of tanks at the facility contained hydrocarbons with flash points of approximately 140° F., and one tank contained 50,000 gallons of liquid hydrocarbon with a flash point of 125° F. Internal tank temperatures during summer weather can be expected to reach or exceed the flash point of the liquids in these tanks.

19. Hazardous substances consisting of volatile hydrocarbons including benzene, toluene, trichloroethane, ethyl benzene, and phenol have been identified in samples of oil taken at the facility.

20. As of March 29, 1985, approximately 4.2 million gallons of chemically contaminated aqueous liquids had been found to be abandoned at the facility. Analyses of portions of these wastes have indicated Chemical Oxygen Demand (COD) and Total Organic Carbon (TOC) concentrations as high as 150,000 ppm and 54,000 ppm, respectively. Levels of cyanide as high as 10 ppm and of lead as high as 59 ppm have been identified upon analysis of the water phase of the contents of tanks at the facility, in addition to chloroform and anthracene.

21. The hazardous substances comprising chemical contaminants of the liquids referenced in Paragraph 20, supra, including but not limited to benzene, cyanide, toluene, phenol, and PCBs, are considered to have high toxicity.

22. As of March 29, 1985, significant amounts of contaminated sludges had been abandoned at the facility. It was estimated that on that date, the site stored approximately 500,000 gallons of such contaminated sludges.

23. EPA has conducted limited air monitoring at the site. Organic Vapor Analyzer (OVA) readings of over 400 ppm have been obtained while measuring vapors released from liquids being pumped from storage tanks during December 1982. Positive tests for benzene and phenol in air have been obtained using Draeger tubes and Lomotte Sampling Kits.

24. Among the hazardous substances listed above, PCBs, benzene, cyanide and lead, inter alia, have been determined by EPA to cause adverse human health effects.

25. Certain hazardous substances found at the site, if released to the environment in a manner providing vectors of exposure to the general public, could be responsible for adverse human health effects from ingestion, inhalation, or direct contact.

26. Wastes detected in analyses of samples taken from tanks at the facility indicate a potential fire hazard due to the low flashpoint of the constituents of those wastes.

27. A fire at the facility involving some of the substances listed in paragraph 21, supra, could result in creation of toxic by-products including, but not limited to, chlorinated dibenzofurans and dioxins from the burning of PCBs. One such chlorinated dioxin is tetrachlorodibenzodioxin, one of the most acutely toxic substances known.

28. A federal Centers for Disease Control (CDC) representative visited the facility on March 15, 1985 and determined that the facility constitutes a significant hazard and threat to public health. The CDC has recommended immediate removal from the facility of those highly toxic materials found at the site.

29. A release of hazardous substances from the property traveling west could reach River Road. A release of hazardous substances from the property traveling east could enter the Hudson River. A sudden spill (e.g., from transfer equipment failure or from failure of deteriorating containment structures) could travel west from the site toward River Road and an active industrial railroad spur. In the event of a spill reaching River Road, vehicular traffic, if not diverted, could spread contamination from the site over additional portions of River Road or other public thoroughfares in the Edgewater area. A spill from the site traveling east could travel directly to the Hudson River either through underground piping and drain systems on the site or through storm drain lines located on the property immediately to the south of the site.

30. The present owners of the facility, James Frola and Albert Von Dohln, hired a contractor in the fall of 1982. From that time until the summer of 1983, the contractor attended to small spills at the facility, maintained a containment boom along the eastern property boundary with the Hudson River, dismantled sections of transfer piping, installed emergency clay diking, constructed an overland discharge line from the facility oil-water separator to the Hudson River, and arranged

for the disposal of 200,000 gallons of contaminated aqueous solution from a leaking tank. 776,000 gallons of oil were removed from the facility and sold during that time. No major cleanup or stabilization of the site was achieved, however, and no steps were taken to eliminate the occurrence of releases and the threat of releases from the facility to the environment or to abate the existence of a threat posed by the facility to the public health, welfare, or the environment.

31. In November 1983 the property owners entered into an administrative consent order with NJDEP. That order detailed steps required for a cleanup of the site. The requirements of that order were not satisfied, and the property owners remain in violation of that order.

32. In or about July 1984, EPA commenced an action pursuant to 40 C.F.R. Part 112 against certain alleged owners and operators of the site, including some Respondents to this Order, for failure of the facility to have prepared, maintained, and implemented a Spill Prevention Control and Countermeasure (SPCC) Plan. The deficiencies noted in that administrative action were not corrected, and that action, including the matter of a proposed penalty of $200,000, remains unresolved.

33. During the period September 1984 until March 1985, EPA, the owners of the facility, and representatives of some of the Respondents, attempted to negotiate a plan to initiate cleanup of the facility. The interests with whom EPA was negotiating failed to come forward with such a plan.

34. On April 3, 1985, following a written notification to the then identified potentially responsible parties which failed to secure a binding commitment of private parties to perform a removal action at the facility, EPA commenced performance of an Immediate Removal Action at the facility pursuant to 42 U.S.C. §9604 and 40 C.F.R. §300.65.

35. On September 30, 1985, EPA executed with Allied a Consent Order pursuant to 42 U.S.C. §9606. Under the terms of that Order, Index No. II-CERCLA-50108, Allied, following the occurrence of certain conditions precedent, will perform the uncompleted elements of a Removal Action at the facility, with the exception of those actions enumerated in the Scope of Work attached to this Order. Work to be performed by Allied will be funded in part by Allied and in part by other cooperating responsible parties, whose names appear on Attachment B hereto. EPA has agreed to enter into a Covenant Not To Sue with these cooperating responsible parties concerning the site as a result of their agreement to partially fund Allied's performance of the aforesaid Consent Order. Hereinafter, these responsible parties are collectively known as the "Settling Parties."

36. EPA has determined that the release of material containing hazardous substances from the facility into the environment constitutes a release of hazardous substances from a facility to the environment.

37. Hazardous substances, pollutants, and contaminants threaten to continue to be released from the facility into the environment absent the taking of appropriate actions at the facility.

38. The continued releases and threatened releases of hazardous substances, pollutants, and contaminants from the facility to the environment presents an imminent and substantial endangerment to the public health, welfare and the environment. EPA believes that corrective actions, as contemplated by §§300.65 and 300.67 of the NCP, are appropriate at the facility to prevent and/or mitigate immediate and significant risk of harm to human health and/or the environment.

DETERMINATION

Based upon the FINDINGS set forth above and the entire administrative record, EPA has determined that the release and threat of release of hazardous substances to the environment from the facility may present an imminent and substantial endangerment to the public health, welfare, and the environment within the meaning of §106(a) of CERCLA, 42 U.S.C. §9606(a).

ORDER

Based upon the foregoing FINDINGS and DETERMINATION, IT IS HEREBY ORDERED that Respondents take certain actions to abate the release and threat of release of hazardous substances, pollutants, and contaminants at and from the facility into the environment. Elements of a Removal Program, as set forth in greater detail in Attachment A hereto, must be implemented at the facility. The Work Plan resulting from Attachment A shall be deemed incorporated herein and made a part hereof.

In carrying out any and all activities required of Respondents under the terms of this Order, Respondents shall fully participate in the efforts of, and cooperate with, the Settling Parties, and shall take no action inconsistent with the actions being taken by Allied and by the Settling Parties through Allied, in furtherance of Allied's compliance with the terms of EPA Order Index No. II-CERCLA-50108. The full participation by a Respondent in the actions to be taken by Allied, including the sharing of any costs incurred in performing the actions required by this Order and by Order Index No. II-CERCLA-50108, shall be deemed compliance by such Respondent with this Order.

IT IS FURTHER ORDERED:

1. Not later than 15 (FIFTEEN) days from the effective date of this Order, Respondents shall select a coordinator, to be known as the Designated Coordinator, and shall submit the name, address, and telephone number of the Designated Coordinator to the EPA On-Scene Coordinator (OSC). The name, address and telephone number of the EPA Region II On-Scene Coordinator is: Mr. John Witkowski, On-Scene Coordinator, Response and Prevention Branch, EPA Region II, Edison, New Jersey 08817, 201-321-6739.

2. Respondents shall implement the Removal Program of which the Scope of Work is set forth in Attachment A hereto pursuant to the schedule contained therein and to be developed thereunder.

3. As appropriate during the course of implementation of the Removal Program at the facility, Respondents or their consultants or contractors, acting through the Designated Coordinator, may confer with the OSC concerning the Removal Program. Based upon new circumstances or new information not in the possession of EPA on the date of this Order, the Designated Coordinator may request in writing the approval of a modification of the Removal Program, as incorporated in Attachment A hereto, from the Director, Emergency and Remedial Response Division, EPA Region II.

Respondents shall provide written notification to EPA of any circumstances which have caused, or which Respondents believe are likely to cause, a delay of performance. Such written notice, which shall be provided as soon as possible after occurrence of the delay or discovery of circumstances which Respondents believe are likely to cause a delay, but in no event later than 10 (TEN) days after the date when Respondents knew of the occurrence of such circumstances, shall be accompanied by such documentation as may be specified by the OSC, including, if required by the OSC, a plan of action taken, or to be taken, by Respondents to minimize any delay and a projection of the date(s) on which delayed activities will be completed.

If approved by the Director, Emergency and Remedial Response Division, such modification shall be implemented immediately by Respondents and shall also be deemed a modification of this Order.

4. In the event of an inability or anticipated inability of Respondents to perform any of the activities required by the Removal Program, the Designated Coordinator shall immediately inform the OSC of the reason for, and date and length of, any anticipated inability to perform, and the actions taken or to be taken by Respondents, or any of them, to avoid or mitigate the impact of such inability to perform, including the proposed schedule for such actions. Neither notification pursuant to this Paragraph, nor notification pursuant to Paragraph 3 of this Order, supra, shall itself relieve Respondents of any obligation to comply with the provisions of this Order.

5. In the event of a significant change in conditions at the facility, the Designated Coordinator shall notify the OSC immediately at the following emergency telephone numbers: 201-548-8730 or 201-321-6670. Until the OSC provides direction, Respondents may, at their discretion, take reasonable measures under the circumstances. Respondents shall remain liable for any adverse consequences of such measures. In the event the OSC determines that the activities under the Removal Program, or significant changes in conditions at the facility, pose a substantial threat of immediate and significant risk of harm to human life or health or the environment, EPA may order Respondents to stop further implementation of the Removal Program or to take other and further actions reasonably necessary to abate the emergency. This provision is not by way of limitation to any rights EPA may have under §§300.65 or 300.67 of the NCP or any other applicable provision of the NCP, or under any other applicable law or regulation.

6. EPA acknowledges that the work specified by and set forth in Attachment A is consistent with the National Contingency Plan, and will certify the work, if properly performed, as having been performed consistently with the NCP. All actions and activities carried out by Respondents pursuant to this Order shall be done in accordance with all applicable federal, State, and local laws, regulations and requirements and with applicable provisions of the NCP.

7. Failure of the Respondents to expeditiously and completely carry out the terms of this Order may result in EPA taking the required actions unilaterally, pursuant to §104(a)(1) of CERCLA, 42 U.S.C. §9604(a)(1). Should such unilateral action become necessary, Respondents may be held liable for 4 (FOUR) times the cost of such actions to the United States pursuant to 42 U.S.C. §§9607(a) and 9607(c)(3).

8. Respondents' Designated Coordinator shall provide written weekly progress reports to EPA with respect to all actions and activities undertaken pursuant to this Order. All submittals, deliverables, and notifications to EPA pursuant to this Order shall be made to the OSC and, in triplicate, to the Chief, Site Investigation and Compliance Branch, Emergency and Remedial Response Division, ATTN: Quanta Project Coordinator, unless otherwise provided herein.

9. Respondents shall assure that with respect to any premises, other than the facility, which any Respondent or its contractor or consultant may use in connection with implementation of this Order, unimpeded access to such premises shall be provided to EPA and to EPA's duly authorized employees, contractors, and consultants.

Any contract between a Respondent and a third party, or between two or more Respondents, for removal and/or disposal of waste from the facility or for performance of laboratory analytical work shall provide for unimpeded EPA access to either a waste storage or disposal site used in connection with such removal and/or disposal of wastes from the site or an analytical laboratory used to perform work in connection with implementation of the Removal Program.

10. Employees of EPA shall have full access to all technical records and contractual documents maintained or created by Respondents or their contractors in connection with implementation of the Removal Program.

11. With respect to all chemical analyses and all disposal operations conducted in compliance with this Order, the complying Respondent(s) shall provide the OSC with the identity of and, if applicable, licensing identification numbers of (e.g., with respect to waste haulers or disposal facilities) all persons or entities performing such work within 2 (TWO) working days of selection of such persons, companies, or facilities, for purposes of establishing that all such activities have been performed in accordance with EPA approved methodology and that all wastes ultimately disposed are disposed at EPA-approved hazardous waste disposal facilities.

12. All removal work performed pursuant to this Order shall be performed under the direction and supervision of one or more registered or otherwise appropriately licensed professional engineers, geologists, or hydrologists, as appropriate to the task being performed.

13. All chemical analyses shall conform to EPA Quality Assurance/Quality Control procedures and shall conform with Sections 10 and 1.3, respectively, of the EPA publications entitled "Test Methods for Evaluating Solid Waste" (SW-846) and "Guidance for Preparation of Combined Work/Quality Assurance Project Plans for Water Monitoring."

14. Upon request by the OSC, Respondents and/or their contractors shall provide split samples of any material sampled in connection with implementation of the Removal Program.

15. The United States, by issuance of this Order, assumes no liability for any injuries or damages to persons or property resulting from acts or omissions by Respondents, or any of them, or Respondents' employees, agents, contractors, or consultants, in carrying out any action or activity pursuant to this Order, nor shall the United States be held as a party to any contract entered into by Respondents, or any of them, or by their officers, employees, agents, contractors, or consultants in carrying out any action or activity pursuant to this Order.

16. Nothing contained in this Order shall affect any right, claim, interest, defense, or cause of action of any party hereto with respect to third parties, which parties are not Respondents to this Order, or with respect to any other persons whom EPA has notified are deemed potentially responsible parties in relation to the facility.

17. Respondents shall use their best efforts to avoid or minimize any delay or prevention of performance of their obligations under this Order.

18. Violation of this Order as a result of Respondents' failure to comply with any provision herein shall be enforceable pursuant to §§106(b) and 113(b) of CERCLA, 42 U.S.C. §§9606(b) and 9613(b). Respondents may also be subject to cost recovery by the United States, civil penalties and/or punitive damages as provided in §§106(b), 107(a), and 107(c)(3) of CERCLA, 42 U.S.C. §§9606(b), 9607(a), and 9607(c)(3), for failure to comply with the terms of this Order. Nothing herein shall preclude EPA from taking such additional actions as may be necessary to prevent or abate an imminent and substantial danger to the public health, welfare or the environment arising from conditions at the facility and recovering the costs thereof, nor shall anything herein preclude NJDEP from taking legal action pursuant to State law.

19. Respondents will be held liable for all response and oversight costs incurred by the United States in connection with the site prior to 12:01 a.m. June 15, 1985, as well as for all enforcement costs incurred in connection with the site. Respondents may also be liable to other responsible parties or to the United States for some or all costs incurred on and after 12:01 a.m. June 15, 1985. Upon Respondents' failure to carry out the requirements of this Order, Respondents shall be liable for any costs incurred by the United States in connection with necessary response actions resulting from such failure, and such costs shall be subject to collection by the United States in an action commenced pursuant to §107 of CERCLA, 42 U.S.C. §9607.

20. Following Respondents' completion of the requirements of this Order, Respondents may apply to the Director, Emergency and Remedial Response Division, EPA Region II, for a determination and acknowledgment that the requirements of this Order, including all requirements of Attachment A hereto, have been completed in compliance with the requirements of this Order and in compliance with the NCP. Said Director's determination, and, if appropriate, acknowledgment, on Respondents' application will be issued within 60 (SIXTY) days of receipt of Respondents' application.

The provisions of this paragraph do not release Respondents, or any of them, from liability for the performance of acts, or the payment of money, which may arise as a result of conditions at the site relating to surficial pollution or contamination, or releases or threatened releases to the environment resulting therefrom, which conditions were unknown or undetected at the facility on the effective date of this Order, with respect to any surficial site condition posing an imminent and substantial endangerment to the public health, welfare, or the environment which may occur or arise at the facility on or after the effective date of this Order, or where additional information unavailable on the effective date of this Order indicates that conditions at the facility, regardless of compliance with the terms of this Order, may pose an imminent and substantial endangerment to the public health, welfare or the environment.

Nothing in this Order shall be deemed to release, discharge, or otherwise relieve Respondents from the obligation to perform such further or additional response actions or activities at the facility (other than the activities performed in furtherance of Attachment A), or such other response actions as may be required, whether at the facility or elsewhere, as a result of the generation, storage, handling, transportation, treatment, or disposal of hazardous substances, pollutants or contaminants resulting from the performance of the Removal Action conducted pursuant to Attachment A, as may be deemed necessary pursuant to CERCLA or other applicable laws.

Nothing in this Order shall be deemed a release of Respondent with respect to claims by the United States or any State for natural resources damages attributable to the ownership, operation or use of the facility, or releases to the environment from the facility.

Except as otherwise provided in this paragraph, nothing in this Order shall be deemed to release, discharge, or otherwise relieve Respondents from liability for the payment of money to EPA or to the United States pursuant to 42 U.S.C. §9607 or other federal laws for costs incurred by the EPA or the United States as a result of performance of, or involvement by the United States in, actions or activities taken in connection with the facility.

21. This Order shall apply to and be binding upon Respondents and Respondents' officers, directors, employees, agents, servants, receivers, trustees, successors, and assignees and upon all persons, including but not limited to firms, corporations, subsidiaries, contractors, and consultants, acting under or for Respondents.

22. This Order shall be effective at 12:01 a.m. on November 12,1985. All times for performance of actions or activities to be performed under this Order shall be calculated from the effective date, except as elsewhere provided to the contrary and except as such dates may be inconsistent with dates for performance of actions identical to actions required to be performed by Allied in EPA Order Index No. II-CERCLA-50108, which dates shall control.

23. A conference will be held at 10 a.m. on October 28, 1985 in Room 238 at 26 Federal Plaza, New York, New York to discuss this Order, including its applicability, the Findings upon which the Order is based, the appropriateness of any action or activity required to be undertaken herein, or any other issues or contentions directly relevant to the issuance of this Order which any Respondent may have regarding this Order. Such conference is not, and shall not be deemed to be, an adversary proceeding or part of a proceeding to challenge this Order, and no official or unofficial stenographic record, or other recording of such proceeding, shall be kept or permitted. Any Respondent may appear at such conference in person or through an officer, attorney-in-fact, engineer, environmental consultant, or other designated representative. All attendees will be required to complete a sign-in form.

Any communication concerning this Order shall be directed to Mr. Henry Gluckstern, Assistant Regional Counsel, Office of Regional Counsel, United States Environmental Protection Agency, Region II, 26 Federal Plaza, Room 437, New York, New York 10278, telephone (212) 264-4430.

Christopher J. Daggett

CHRISTOPHER J. DAGGETT
Regional Administrator
U.S. Environmental Protection Agency
Region II

OCTOBER 16, 1985
DATE

ATTACHMENT A

SCOPE OF WORK TO BE PERFORMED BY RESPONDENTS IN THE IMPLEMENTATION OF THE REMOVAL PROGRAM

All activities to be performed by Respondents shall be coordinated through the Designated Coordinator of Allied Corporation (Allied), as that Designated Coordinator was established under EPA Order Index No. II-CERCLA-50108, so as to assure that Respondents' actions shall not interfere with Allied's performance of the requirements of that Order.

The detailed scope of work to be performed by Respondents in implementing/performing the activities in this Unilateral Order under the Removal Program at the facility is set forth below.

Development of Detailed Workplan

Within 30 (THIRTY) days of the effective date of this Order, Respondents shall submit the first draft of a detailed Work Plan to address the tasks described below. The detailed Work Plan shall include, but not necessarily be limited to, the following:

a. a detailed time schedule for performance of the specific tasks set forth in this Order and in this Scope of Work, and a detailed description of how these tasks will be accomplished;

b. an overall Site Operations Plan for performance of tasks specified in this Order, including identification (or provision for later advance identification) of contractors and subcontractors, and specification of such contractors' and subcontractors' respective responsibilities;

c. a Health and Safety Plan;

d. a contingency plan for conducting site activities.

Sampling and Analysis of Waste

A sampling and analysis plan shall be developed by the respondents in consultation with the OSC. The plan shall provide for sampling of soils at and around the facility, oily waste from the surface of the Hudson River inside the boomed area, Hudson River sediments, the contents of tanks D-29 and

D-30 (unless otherwise specified by Allied's Designated Coordinator) and the contents of all underground tanks identified by Allied (unless otherwise specified by Allied's Designated Coordinator). Additional samples shall be taken and analyses performed, from time-to-time, as may be designated by the OSC. All samples except air samples shall be analyzed for Priority Pollutants, unless otherwise indicated by the OSC. Unless otherwise provided herein, all samples shall be taken within 30 (THIRTY) days of the date of this Order. Sampling results shall be reported to EPA within 30 days of the date of sampling. EPA shall be provided with splits of any samples taken, at the option of the OSC. Forty-eight hours minimum advance notice shall be provided to the OSC that a sampling episode is to occur.

Hudson River sediments shall be sampled along an area extending 500 (FIVE HUNDRED) feet north and south of the facility, and 300 (THREE HUNDRED) feet east of the facility. Samples shall be collected on a grid with a maximum distance between centers of 100 (ONE HUNDRED) feet. Sample cores shall be taken to a depth at which no visual contamination exists. The depth and location of each core shall be noted.

Quarterly air monitoring shall be performed to determine air quality at and adjacent to the site. The first monitoring shall occur within 60 (SIXTY) days of the effective date of this Order. A minimum of 4 (FOUR) samples shall be taken along the perimeter of the facility, and a minimum of 1 (ONE) sample shall be taken within the A and D tank farms, respectively, unless the OSC determines that additional samples shall be taken or additional locations monitored. At a minimum, the following characteristics shall be analyzed and quantified:

coal tar derivatives
toluene
cyanides
benzene and its compounds
phenols

Waste Removal/Disposal

Any materials required to be removed from or disposed of from the site which Respondents determine can not be utilized as a source of energy or recycled as product in accordance with all applicable federal, state, and local laws and regulations shall be removed from the site and disposed of at appropriate waste disposal facilities in accordance with the then applicable EPA Off-Site Removal Policy (i.e., the Policy as of the date on which a particular shipment physically leaves the facility).

All material removed from the facility as a hazardous waste shall be handled and manifested accordingly.

Boom Deployment/Oil Collection

The containment boom currently installed along the Hudson River shall be maintained as necessary to prevent discharge of oil to the Hudson River. The boom shall be maintained so as to contain waste oil escaping from the facility to the Hudson River in as narrow an area immediately adjacent to the property as possible. Contained oils shall be removed during every tidal cycle and disposed of properly. A filter box or sorbent pads may be placed perpendicular to the bulkhead to absorb oil moving parallel to the bulkhead at the approach of low tide. The filter box shall be maintained, and/or the sorbent pads replaced, as necessary.

Removal of Tanks D-29 and D-30

After consultation with Allied's Designated Coordinator, Respondents shall clean and remove from the site tanks D-29 and D-30, which are adjacent to the Hudson River. Allied may, at its option, clean and/or remove said tanks, in which event Respondents shall be deemed relieved of liability for such removal under this Order. Allied's removal of said tanks shall not relieve Respondents of any liability they may have to Allied under applicable law to compensate Allied for its costs in performing such removal. All waste, including the tanks, shall be disposed of as set forth above.

Repair and Maintainence of Facility Fire Protection System

Respondents shall provide a minimum of 5 (FIVE) working fire hydrants within the facility. A sufficient quantity of fire hose shall be provided and distributed within the facility to reach any location within the site. Fog nozzles shall be provided for each hose. Respondents shall also maintain a minimum of 250 gallons of foam at the site in a vehicle or vehicles moveable to any location at the site without the use of mechanized equipment.

Decommissioning of Tanks

After consultation with Allied's Designated Coordinator, all above and below ground tanks, including tanks adjacent to the River and on both sides of the facility perimeter dike, shall be emptied, cleaned, and decommissioned. Decommissioning shall include placing holes in the bottom of each tank so that any liquid which enters the tank will not collect in the tank. Allied may, at its option, perform such decommissioning, in which event Respondents shall be deemed relieved of liability for decommissioning under this Order. Allied's performance of decommissioning shall not relieve Respondents of any liability they may have to Allied under applicable law to compensate Allied for its costs in performing decommissioning. All waste created during decommissioning shall be disposed of as set forth above.

Removal of Visibly Contaminated Soil

Respondents shall develop a plan, which must be approved by the OSC, to remove all visibly contaminated soil from the site. The OSC shall determine the extent of soil removal necessary and whether or not replacement with clean soil or regrading of any area of the site is necessary. All contaminated soil shall be disposed of consistent with waste disposal provisions of this Scope of Work.

Records

The following records, at a minimum, shall be created and maintained by Respondents and provided to the OSC at any time upon his request:

a. days and times of operation of all activities under this Removal Program;

b. inspection and replacement and/or maintenance dates for deployed sorbent boom and/or filter box;

c. daily weather records;

d. daily quantity of aqueous solution removed, specification of tanks from which removed, and destination of all aqueous waste loads removed from the facility. Copies of all manifests with respect to hazardous wastes, and copies of all bills of lading, invoices, and gate receipts with respect to all materials removed from the facility, shall be maintained at the facility;

e. daily quantity of hydrocarbon removed, specification of tanks from which removed, and destination of all hydrocarbon waste loads removed from the facility. Copies of all manifests with respect to hazardous wastes, and copies of all bills of lading, invoices, and gate receipts with respect to all materials removed from the facility, shall be maintained at the facility;

f. daily readings for air quality determinations at the facility and location of taking of all such readings;

g. identification of all operational problems and their resolution;

Submittal of the draft of the Work Plan to EPA shall be accomplished in the same manner as is provided for submittal of deliverables in Paragraph 8 of the Order.

EPA will review and comment on the draft of the Work Plan. EPA will address its comments to the reasonableness of the time period set forth for completion of the removal activities enumerated in the draft of the Work Plan and to conformance of the draft of the Work Plan with sound management, engineering, and scientific practices, technological feasibility, established environmental monitoring procedures, and utilization of environmentally sound and acceptable waste disposal practices.

Within 30 days of Respondents' receipt of EPA's comments on the detailed outline, Respondents shall submit a final Work Plan as required by those comments, or as otherwise directed by EPA, and shall submit the final document to EPA. EPA remains the final arbiter in any dispute regarding the adequacy and sufficiency of the substance or form of the final Work Plan. At such time as EPA determines that the final Work Plan is acceptable, EPA will transmit to Respondents a written statement to that effect.

Respondents shall perform the Removal Program commencing on the effective date of the Order to which this Scope of Work is attached.

Mr. **Torricelli**. My last technical question on this is, the entire strategy is for removal, you are not anticipating any destruction?

Mr. **Librizzi**. Not on site.

Mr. **Torricelli**. Or at sea?

Mr. **Daggett**. Or at sea.

Mr. **Torricelli**. You feel completely confident that you have got the site available for disposal material, the places being moved to, even in these quantities?

Mr. **Daggett**. The question was whether or not disposal facilities are there and will be there. We won't be stuck with the material——

Mr. **Torricelli**. We are not going to have a capacity problem?

Mr. **Librizzi**. It is PCB waste, and, therefore, there are PCB facilities around the country. We would have to take the waste to the PCB facilities.

Mr. **Torricelli**. Capacity does not appear to be a problem?

Mr. **Librizzi**. Have you noticed any problem?

Mr. **Witkowski**. There are approximately 260,000 gallons of oils contaminated with PCB's that remain on site. At this point in time, the technology for treating material on site to destroy the materials hasn't been fully investigated. One of the reasons for it is that the facilities across the country that are licensed under RCRA to accept—or TSCA and RCRA—to accept PCB contaminated wastes have been indicated to us they are backlogged quite a few months.

Mr. **Torricelli**. There are people who propose doing this at sea with regard to the Edgewater site.

Mr. **Witkowski**. The landowner and principal responsible party for at-sea incineration to get on a list to see if they would be able to take it, at this point in time they say that they are backlogged.

Mr. **Torricelli**. They are not backlogged.

Mr. **Daggett**. Let me clarify that, if I may.

First of all, all the wastes to be used for the research burn permit, which is the only permit that's been discussed so far, have been identified, and there have been a mass, if you will—after that research burn, we still have to review the results of that burn to determine whether or not we even want to go forward with ocean incineration in general. Then you have the final regs out, and then you have to entertain applications for operating permits.

Mr. **Torricelli**. At which time do you expect Edgewater to be history.

Mr. **Daggett**. That is right. Exactly. By the time that gets done, hopefully, Edgewater will be history.

Mr. **Torricelli**. To close this issue, however, you still are looking at possible capacity problems, given the volume of materials, PCB's? That isn't something for us to watch out for?

Mr. **Daggett**. One of the areas for capacity in the country which has been exceeded by demand is the area of PCB wastes, and that potentially is a problem, yes.

Mr. **Torricelli**. Now, having dealt with one of the relative successes, let's move to one of the most difficult—Carlstadt, scientific chemical. It is difficult to know where to begin. A deadline has now been missed, the 16th, as I understand it. Perhaps you could bring us up to date on where you are with your discussions with the company. I would appreciate knowing if you have discovered who is the company, and finally what it is we intend to do about the fact this deadline has now been missed again.

Mr. **Daggett**. The company is known as Inmar, Inmar Associates. I am not sure of the exact location of Inmar, but Inmar Associates—they indicated the deadline—the original deadline was January 16, where they had to submit a plan, a work plan, to complete the cleanup. A number of things were done by Inmar in 1984, and the first part of 1985——

Mr. **Torricelli**. Was this established by a consent decree?

Mr. **Librizzi**. It was under the supervision of DEP. I am not quite sure whether it was a consent decree or not.

Mr. **Torricelli**. I was wondering whether these people are under contempt or merely missed an administratively set deadline? It's only administrative consent?

Mr. **Witkowski**. No; New Jersey DEP obtained a court order to stop operations at the site.

Mr. **Torricelli**. So these people are not in contempt of court?

Mr. **Daggett**. One of the questions, and I don't know the answer to it, I would ask to what degree were they supposed to actually clean up? That may be part of it that's at issue, I am not sure. We will clarify that point. If I may——

Mr. **Torricelli**. Let us come back to it.

Mr. **Daggett**. Yes; They had a remaining amount of material that needed to be cleaned up. That is why we issued the administrative order on October 23. We issued it to accomplish that task. That was what was required to have by January 16, a work plan. On January 21, not having received that work plan, we essentially indicated to them that this hadn't been done, and we said we were giving them until January 24, which was this past Friday. As of this morning, we don't have any answer from them on the issue.

Mr. **Torricelli**. They were asked, by the way, to appear here today and declined.

Mr. **Daggett**. I wasn't aware of that.

As of today, the $5,000 per day penalties are now accruing effective January 21, so they have been accruing for the last 5 or 6 days. We basically have four options right now. We can start by calling in the owner and negotiating further.

Second, failing that, we can go to court over the issue.

Mr. **Torricelli**. What I am looking for, Mr. Daggett, is I would like some indication of the extent—I would like to know the extent of your patience. January 16 having come and passed, for some of us, years have come and gone on this site, and when we see progress, no matter how measured, we are able to have some patience. Here there has been no progress at all.

Mr. **Daggett**. My patience on these sites usually goes with the cooperativeness of the group. If they are not cooperative, my patience is very short. The reason I was going through the options was to explain to you basically the next steps I intend to take.

As I indicated, we can start by negotiating with them, the second, taking them to court; third, we could ask the generators, who as you know entered into the consent agreement calling for the remedial investigation and feasibility study. We could ask them to get together to clean up the surface and then to allow them to go on for the remedial investigation stage.

Mr. **Torricelli**. Do we know enough yet to establish the danger of what kind of contamination is in the ground, spreading beyond the surface contamination points?

Mr. **Librizzi**. Right now we are in the cleaning up of the surface. The consent order that we have with the generators, transporters and the operators, is to do the additional field work once the surface contamination has been dealt with to determine what is in the ground——

Mr. **Torricelli**. So it's a larger issue than what's in the ground.

Mr. **Librizzi**. It's a larger issue but needs to be taken care of.

Mr. **Torricelli**. The truth of the matter is there is a bomb in Carlstadt, we need to know how big it is.

Mr. **Daggett**. I am not sure I would characterize it as a bomb. There is something in Carlstadt, we need to identify what it is, yes, very much so.

Let me say the last option we have is to do it ourselves. Now, that would have to be done in light of the Superfund slowdown. What we would do in this case is turn to the State, talk to them about the particular site and see whether or not they were willing to put the money up front. We haven't entered into those discussions yet.

What I suspect that I will do——

Mr. **Torricelli**. We're going through it very briefly here.

Mr. **Daggett**. What I suspect that I will do is to get—begin and take a very brief period of time to negotiate with the owner, to give them the last shot, if you will, maybe taking a week to negotiate with them, if we are not going anywhere, to move into court and at the same time see what we can do about doing the action ourselves.

Mr. **Torricelli**. Are we talking about February? Is that when you will reach a judgment on the strategy?

Mr. **Daggett**. Yes; I don't think it would take us any more than a week to determine whether or not there's going to be some sort of action——

Mr. **Torricelli**. This, as I understand, is a bankrupt corporation. Are you able to reach the individuals in the corporation on a $5,000 a day fine?

Mr. **Daggett**. I am not sure of the details of the status of the financial picture.

Mr. **Torricelli**. I am correcting that. Scientific is bankrupt.

Mr. **Librizzi**. We didn't think Inmar was bankrupt.

Mr. **Torricelli**. Was Inmar the successor in title or owner?

Let me just say, Mr. Daggett, this begs Mr. Florio's point before. Obviously February is a reasonable time. In February, you can get no cooperation, you are not getting a real plan, you don't feel you have a cooperative attitude, and a month goes by, we are going to look for a different strategy, and it's the one you outlined, and that is patience has ended. It's then time to use the full powers of the Superfund, and we'll deal with this corporation later and get the public refunded.

I hope that we all agree, because that is what the public would expect on a time table, and that is certainly what I would expect on a time table in this.

Mr. **Daggett**. And I, as well. I think if you look back, I have tried, as I have indicated, to show patience based on the willingness of companies to cooperate. When they don't, I am not at all hesitant to go after them.

Mr. **Torricelli**. Thank you. That concluded my two Federal sites. Were there any other sites you wanted to comment on? Thank you, Mr. Daggett. I appreciate it very much.

Mr. Baublitz, welcome. If anyone in the environmental difficulties in Bergen County is a familiar face to us, it's you. You have become one of us.

I wanted to talk to you about DOE, the Department of Energy, and its operations in Maywood and where we are. As a preface to that, as you know, Senator Bradley arranged a meeting with himself, Senator Lautenberg and others, with the Secretary of Energy, to present some of the realities of the Maywood site. And that is why we have all been pleased by the removal of the soil. It is a great success story of cooperation between a company, a community and the Government at all levels.

We now have to face the long-term prospects. We stated to the Secretary, one, the strength of our position that Maywood had not become a permanent disposal site, the evidence we had why that was not acceptable, but also pressed the question what strategy the Federal Government might have for a long-term disposal. Unfortunately, the Secretary entered into this, you should know, by discussing the radon problem in Essex County where he said "I will certainly be glad to see a Federal role in taking responsibility for this material if anyone could show me a Federal nexus for the material." I said, "Well, since that is your test, have I got a town for you."

That is what I was referring to before with Senator Lautenberg, who then posed the questions to him, "How about a Federal disposal site?" First, let's return to where we are, how much has been removed, how much of the soil, how much has remained, and try to separate them out by the residential properties from the commercial properties and a little bit by town, if we could, Lodi versus Maywood and Rochelle Park.

Mr. **Baublitz**. Thank you, Mr. Chairman. It is a pleasure to be here to discuss with you——

Mr. **Torricelli**. Mr. Baublitz, if you will forgive me, your statement, by the way, will be entered into the record. So any parts of it you would like to summarize or bring to our attention, please do.

Mr. **Baublitz**. Yes, I will.

We are pleased to be here to discuss our activities at sites we are responsible for in the Bergen County area. And in accordance with the list of sites identified on the invitation list, we also have come prepared to make some comments regarding not only our work ongoing at the Maywood Rochelle Park, Lodi site, but also to address briefly the question of well water contamination at Lodi and the storage facility in Kearny and what role, if any, we can play.

I have present with me today Mr. Edward Delaney, who is director of our Division of Facility and Site Decommissioning, as well as Robert Atkin, who is the project engineer for the Maywood activities of our Oak Ridge Operations Office and Philip Crotwell, who is the project engineer for Bechtel National, our contractor responsible for those activities, and they will assist me in answering as fully as we can your questions and specific interest in terms of progress.

What I would propose to do is summarize reasonably briefly the content of my prepared statement, which will address, at least partially, the status and progress at the Maywood, Rochelle Park, and Lodi site and, as I said, touch briefly on these other two questions, and then we can return and deal in more detail, as you wish, with the site progress.

Mr. TORRICELLI. Let me preface that by saying, of course, our knowledge of the site is fairly extensive in working with you on an almost daily basis on this problem for the last couple of years, so please go only to what would appear to be the pending questions, and assume significant knowledge.

Mr. BAUBLITZ. All right, I will do that, sir.

I might open with a very brief synopsis for the record of our reason for being here.

The context of the discussion in question so far has dealt very largely with the Superfund law and the responsibilities under that law of EPA and the State of New Jersey. Maywood is one of four sites that were assigned specifically to the Department in a report accompanying the Fiscal 1984 Appropriations Act, so that it's a site that has come to be the responsibility of the Department only recently.

When that responsibility was assigned, we established as a basis for planning and execution a two-phase program for all four of these sites, including, of course, the one in question here, Maywood, Rochelle Park, and Lodi. That strategy involved two phases.

First the cleanup immediately at locations where humans, people, were most likely to be exposed to the effects of the buried thorium waste, and that would, of course, be residences and commercial properties which are frequently used with a high occupancy rate.

To get that material away from those locations under Department of Energy control, where then the hazard would be essentially eliminated, and then the second phase, the permanent disposition of that material at some suitable location. And, as you know, we are formally studying, as we reported we would to Congress as a result of the initial assignment, the feasibility of stabilization in place, and we'll have the results of that work available for final publication and personal review early next month we hope.

The strategy is now well along and being implemented. We have made, we believe, substantial progress at the site. By the middle or toward the end of fiscal 1985, we had completed the cleanup of all the residential properties that had been designated in Maywood and Rochelle Park and had established at the Stepan Chemical site a temporary storage site which fully complies with all the State requirements, and we have accepted ownership of that storage site, so it is fully under our control and management.

We have established monitoring wells around the site, and it is a routine monitoring program associated with it. As you are well aware, we did discover as a result of our radiation surveys in the area, that some material from the Stepan site had spread or had been carried to adjacent properties, to properties in the adjacent town of Lodi, and we have cleaned up eight residences at Lodi as well. A total to date of over 33,000 cubic yards of contaminated material has been removed from properties in Rochelle Park, Maywood, and Lodi and is in storage at the temporary storage site. That represents something on the order of 26 properties.

In the current fiscal year, we have planned to complete the cleanup of most of the commercial property, which is called the Ballod property, in Rochelle Park, and complete characterization of the Stepan property itself, additional Lodi residential-commercial properties and the so-called Scanel property in Maywood. This year we will also continue characterization of areas in the vicinity along New Jersey Route 17, which appears to be some contamination along the embankment and possibly under the road itself, and be working on the characterization of properties in the vicinity of the Sears warehouse, which appears to be a fairly extensive area of contamination.

During subsequent years, up through our current plan in 1989, we will be completing the cleanup of all these properties, all commercial properties, there is a single State property involved, and the contamination along Route 17. This will bring the phase 1 cleanup to a total of approximately 143,000 cubic yards of material, which will be in temporary storage.

Concerns have been raised, as you are well aware, by the citizens and officials of Maywood and Rochelle Park over continued use of the temporary storage site. We are working closely with the town officials to resolve these issues and will continue to do so so that the phase 1 work can continue expeditiously to completion.

We have agreed to consult with those officials prior to bringing any material to the storage site from Lodi or other jurisdictions. We are complying, as I said, with all site requirements for the temporary storage site, and the stored waste will continue to be monitored and controlled by the Department to assure there is no impact to public health.

The second phase, of course, involves permanent disposition of the waste. As I mentioned, we are about to complete our study, and the report will be available next month.

Since about 1984, we have been in regular communication, and by that I mean at least once per year, with the State of New Jersey, Department of Environmental Protection, regarding the need for a disposal site for this waste, as well as similar wastes that are being stored at Wayne and Middlesex, NJ. An agreement was signed with the State and the Department and the town of Middlesex in 1979 dealing with an effort to select a disposal site, and we have provided a copy of that agreement for the committee's information.

In an effort to expedite the start of the site selection process, the Department recently requested assistance from the Governor of New Jersey to begin the process of selecting disposal sites, and we have also provided a copy of that letter for the information of the committee. It is very important, of course, the selection process be started as soon as possible. We estimate 5 to 6 years would be required for selection and construction to be completed.

Of course, even more time might be required if any significant public opposition to the process were raised. That completes a brief summary of our status. As I said, we can return to that.

I will just touch briefly, since it was mentioned in your invitation, on the Lodi well water contamination issue. Our first involvement at Lodi was in March 1984, when the New Jersey DEP asked for our assistance in investigating contamination of a well which was believed to exceed drinking water standards. Both the State and DOE tested water from several Lodi wells. We determined that although there were gross alpha levels detectable, these levels were principally due to the presence of uranium. Because of the way the drinking water standards are stated for gross alpha, did not exceed drinking water limits.

There was no thorium contamination or evidence of rare earth contamination. These results indicated to us that the well contamination did not, in fact, come from the Stepan site, which is principally characterized by thorium waste.

There is one sample of water which did exceed radium drinking water standards. We don't know at this point exactly the reason for that. The radium could be related to uranium or it could be an erroneous measurement.

We discussed extensively with the State the State's proposal for investigation and selection of remedial action for the Lodi ground water contamination, and have agreed to incorporate appropriate monitoring plans for the Stepan site into our own Environmental Program. We have been monitoring the wells in the vicinity of our site since December 1984, and providing information to the State.

There are several specific reasons which I will touch on briefly as to why we do not believe the material discovered in the Lodi wells comes from the Stepan site.

First of all, as I mentioned, there is no evidence of thorium or rare earth in the Lodi water, which is a principal constituent of the material at the Stepan site. In addition, concentrations of uranium in the water in the Lodi wells is actually much higher than the concentration of uranium in the wells on the DOE site. That is contrary to typical patterns of decrease in concentration from the source to other locations.

We discovered there are several Lodi properties that are, in fact, contaminated with radium and uranium in the soil, which appear to be from natural sources.

There is evidence, as I am sure you are well aware, of natural outcroppings of uranium bearing material in eastern Pennsylvania, northern New Jersey, and southeastern New York State that could possibly be the cause for this detection of uranium in ground water.

[The prepared statement of Mr. Baublitz follows:]

House Science and Technology Committee
January 27, 1986
Witness: John E. Baublitz
Page 84, line 1923

STATEMENT OF
JOHN E. BAUBLITZ
DEPUTY DIRECTOR, OFFICE OF REMEDIAL ACTION
AND WASTE TECHNOLOGY
U.S. DEPARTMENT OF ENERGY
BEFORE THE
SUBCOMMITTEE ON NATURAL RESOURCES, AGRICULTURE
RESEARCH AND ENVIRONMENT
COMMITTEE ON SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

JANUARY 27, 1986

Mr. Chairman and Members of the Subcommittee, I am pleased to be here today to discuss the Department of Energy's remedial action activities at the Maywood/Rochelle Park thorium site and the thorium contamination at Lodi from the Maywood site. I will also discuss the Department's position regarding the well water contamination at Lodi and will offer our opinions regarding the radon storage site in Kearney, which we understand to be part of the radium contamination problem in the towns of Montclair, Glen Ridge and West Orange.

Maywood/Rochelle Park/Lodi

Congress directed the Department of Energy (DOE) in the report accompanying the FY 1984 Energy and Water Development Appropriations Act to perform a research and development project to decontaminate four sites and the vicinity properties which were contaminated from these sites. One of the four sites is the Maywood property owned by the Stepan Company and used by a predecessor on the site for thorium ore processing. Another site in New Jersey--the Wayne site previously used by the W. R. Grace Company and a predecessor for thorium ore processing--is not a subject of today's hearing.

The Department formulated plans for these four sites, including Maywood, on the basis that the first priority is to remove the contamination from locations where it is might have some impact on public health and to place the waste under proper control. A second priority is to permanently dispose of the waste associated with the sites. We know from past experience that the movement of large quantities of waste, even at the very low radioactivity levels that we are dealing with at these sites, can be impeded for many reasons. Thus, we established our Maywood project in two phases: (1) the cleanup of locations where people were most likely to be exposed, such as residences and commercial facilities currently in use; and (2) the permanent disposition of the waste from the Phase I cleanup, which is being stored temporarily on the Stepan site, as well as the waste buried on the Stepan site. During the second phase, if stabilization-in-place is not feasible, the waste would be relocated to a permanent disposal site elsewhere in New Jersey. The Department will be working with the State in selecting a disposal site location within the State, will request funds from Congress to construct the site, will use the site for disposal of wastes from DOE remedial action projects in New Jersey, and will maintain the site after closure.

The Department informed the appropriate Senate and House committees of these plans in April 1984. Responses from these committees--including the House Science and Technology Subcommittee on Energy Research and

Production--were supportive of our plans for temporary waste storage, but generally urged the Department to minimize movement of the waste and to examine stabilization of the wastes on the site where practical and technically feasible. In accord with these plans, Congress appropriated funds to continue this work in FY 1985 and FY 1986.

Substantial progress has been made in accomplishing Phase I of the project. During FY 1984, arrangements were made with the Stepan Company to use part of their property for temporary storage of waste. Radiological surveys of properties in Maywood and Rochelle Park were conducted and cleanup was started. By the end of FY 1985, all of the residential properties in Maywood and Rochelle Park needing remedial action had been cleaned up. A temporary storage area has been established which fully complies with State requirements and ownership has been transferred to DOE. Monitoring wells have been installed and the waste is kept under DOE control. During our radiation surveys, we found contamination from the Stepan site had spread or been carried to some properties in the adjacent town of Lodi. Eight Lodi residences were cleaned up and the wastes stored at the Stepan site. In addition, a portion of a commercial property in Maywood (the Ballod property) was cleaned up prior to the owner beginning development. A total of over 33,000 cubic yards of contaminated material has been removed to date from 26 properties in Maywood, Rochelle Park and Lodi.

In FY 1986 we plan to complete cleanup of most of the Ballod commercial property in Maywood and continue characterization of the Stepan property, the Lodi residential and commercial properties, and the Scanel property in

Maywood. We will also continue characterization of areas under New Jersey Route 17, which is contaminated around a portion of the embankment and possibly under the road, and begin characterization of properties in the vicinity of the Sears warehouse. During subsequent years through 1989 we plan to complete the cleanup of the remaining commercial properties, one State property, and the Route 17 embankment. A total of about 143,000 cubic yards of contaminated material will be on the temporary storage site at Maywood upon completion of Phase I. Concerns have been raised in Maywood and Rochelle Park over continued use of the temporary storage site. We are working closely with town officials to resolve issues related to use of the site so that Phase I work can continue expeditiously to completion. We have agreed to consult with town officials prior to bringing material to the storage site from Lodi or other jurisdictions. We are complying with State requirements for the temporary storage site and the stored waste will be monitored and controlled by DOE to assure there is no impact on public health.

The second phase of the project involves permanent disposal of the waste stored and buried on the site. As endorsed by the Senate Energy and Natural Resources Committee, we will complete a study next month of disposition alternatives for either stabilizing the waste on the site or removing all the waste to a new disposal site in New Jersey. Beginning in 1984 we have been discussing with the New Jersey Department of Environmental Protection the need for a disposal site for this waste and similar wastes being stored at Wayne and Middlesex, New Jersey. We have an agreement with the State, signed in 1979, to make a best effort to locate a disposal site for the Middlesex waste (Exhibit 1). Although a general site screening study was performed by the State in 1981, we are unaware of other progress or plans to select a disposal site. In an effort to expedite the start of the site selection process, DOE recently requested assistance from the Governor of New Jersey in selecting candidate disposal sites (Exhibit 2). It is important that the selection process be started as soon as possible, as five to six years will be required for selection and construction to be completed. Even more time will be required if any significant public opposition to the process is raised.

Lodi Thorium and Water Well Contamination

In March 1984, the New Jersey Department of Environmental Protection asked DOE to investigate the contamination of one well in Lodi which was believed to exceed drinking water limits. The State and DOE tested the water from several Lodi wells. Although there were detectable gross alpha levels, these levels were primarily due to the presence of uranium and therefore did not exceed Environmental Protection Agency (EPA) drinking water gross alpha limits. There was no thorium contamination or abnormal rare earth concentrations. This indicated to DOE that the well contamination could not be established to come from the Stepan site, where the principal constituent in the waste is thorium. One water sample did show a level of radium-226 above the EPA drinking water standard for radium, which could be related to the presence of uranium or could be an erroneous measurement.

DOE discussed with the State the State's proposal for investigation and selection of a remedial action for the Lodi ground water contamination. We agreed to incorporate appropriate monitoring plans for the Stepan site into a DOE environmental monitoring plan. Seven monitoring wells at 30- and 60-feet depths were installed at the DOE storage site in December 1984. In addition, the site is being monitored for surface water contamination, radon concentrations, and external gamma exposure rates. Results indicate that offsite ground water contamination is not occurring from the DOE storage site. There are several technical reasons why we do not think the Lodi water contamination is from the DOE storage site:

1. There are no abnormal concentrations of thorium and rare earths in the Lodi water, even though these materials are found in the monitoring well water and waste at the DOE site.

2. The concentrations of uranium in the water in the Lodi wells are much higher than in the monitoring well water at the DOE site. Concentrations typically decrease with distance from a source.

3. There are several Lodi properties with uranium and radium present in the soil. In fact, one soil sample contained about 2 percent uranium. This is evidence of a natural outcrop of uranium-bearing ore typical of this region of New Jersey and parts of Pennsylvania. It is possible that

the elevated levels of uranium in the ground water of this region (as observed by the New Jersey Department of Environmental Protection) are related to acidic surface waters percolating through uranium-bearing materials and carrying the dissolved uranium into the ground water.

4. Another technical point to consider is that the Saddle River is between the Stepan site and the highest reading Lodi wells, and should act as a natural barrier to ground water migration.

The Stepan Company monitors ground water around its site, in accordance with the terms of its NRC license. Although we have not completed our analysis of Stepan's monitoring data, nothing to date would identify the Stepan site as a source of contamination in the Lodi wells.

After discussion of the well water analysis results with the State in May 1984, we arranged to conduct a ground gamma survey of the Lodi area using the Oak Ridge National Laboratory mobile van to identify possible surface contamination. The survey was completed in June 1984 with State participation in the survey planning and in observing the survey. As a result of these mobile gamma scans, 25 properties were identified as having radiation anomalies. Seven indicated thorium-related anomalies and 18 indicated radium-related anomalies. These results were provided to the State. From these mobile gamma scans and later walk-on surveys, we determined that eight residences, one State property, and one commercial property in Lodi were contaminated with thorium material from the Stepan site. Discussion with a Lodi resident indicated the contamination may have been brought from the Stepan site and used as backfill in a number of locations. Our surveys are continuing and we expect to identify additional properties which were contaminated from the Stepan site. These will be included in our project, and we will proceed expeditiously to clean up these properties, with the cooperation of Maywood and Rochelle Park in use of the DOE storage site.

Radium Contamination in Montclair, Glen Ridge, and West Orange

Your invitation to appear before the Subcommittee today requested our testimony on the radon storage site at Kearney. We understand the material at this site to be the waste that resulted from cleanup of radium contamination at 8 to 10 homes in the towns of Montclair and Glen Ridge. We understand there are over 320 properties in these towns and in West Orange with similar contamination. The project is part of the Superfund work being administered by the State of New Jersey and the EPA. A key problem in proceeding with this project is the disposal of the waste. DOE does not have authority to accept this waste and believes it is not in the general public interest to transport it long distances for disposal. We believe that an approach similar to the DOE Maywood project could be used. The contamination would be removed from the residences and other properties where human exposure might occur and the waste stored on a nearby temporary site under control and monitoring by the State and EPA. These actions would assure that there are no impacts on public health. In parallel with these cleanup actions, the State should begin selection of candidate permanent disposal sites in New Jersey. DOE is ready, subject to Congressional authorization and funding, to work with the State in developing a permanent disposal site, providing the site can also be used, if necessary, for the waste from DOE remedial action sites in New Jersey such as the Middlesex, Maywood, and Wayne sites.

In conclusion, I believe our progress at Maywood and Rochelle Park has been been good, not only due to the efforts of our field office staff and contractors, but also due to the cooperation we have received from the State and from the local municipalities. Future progress, as I have stated, will depend heavily on continued cooperation for use of the temporary storage site and to proceed with selection and establishment of a disposal site in New Jersey.

Mr. Chairman, this completes my statement. I would be pleased to answer any questions at this time.

Exhibit 1

Department of Energy
Washington, D.C. 20545

DEC 18 1979

Honorable George J. Tyler
Director, State of Jersey
Department of Environmental Protection
Division of Environmental Quality
Trenton, New Jersey 08625

Dear Mr. Tyler:

I am very pleased to transmit with this letter a signed copy of the Memorandum of Understanding between the United States Government, acting through the Department of Energy, the Borough of Middlesex, New Jersey, and the State of New Jersey, acting through the Department of Environmental Protection, relating to the undertaking of remedial action efforts in the Borough of Middlesex and the Township of Piscataway, New Jersey.

In transmitting this memorandum, we would like to clarify the meaning of certain terms as used in this agreement to prevent any possible future misunderstandings. The substance of all of these clarifications were orally discussed with you at the meeting held in Trenton, New Jersey, between the State, DOE, and the Borough of Middlesex, on November 16, 1979.

As used in paragraph 3a, the word "immediate" means "first priority." It is DOE's intention that the first remedial action to be undertaken will be that at the Rectory at 650 Harris Street in Middlesex, and at the property located at 432 William Street in Piscataway. Also note that with respect to paragraph 9, the NEPA requirements have already been satisfied for these properties.

In paragraph 4, the referred to "level of not exceeding 5pCi/gm" constitutes the criteria upon which cleanup will be based. The phrase "approved remedial action criteria" in paragraph 13 refers to the criteria in effect at the time remedial action is started, i.e., 5pCi/gm, or a superseding criteria promulgated by USEPA, and determined by NJDEP and DOE to be applicable to conditions at Middlesex.

Pursuant to paragraph 6, DOE intends at the time remedial action efforts are completed to return the properties involved to physical conditions comparable to those existing before remedial action efforts were undertaken by restoration of the functional and aesthetic values of the properties to the extent practicable by reasonable and achievable means.

To clarify DOE's certification process as described in paragraph 13, it should be noted that DOE will conduct overview surveys during the undertaking of the remedial action which will be followed by final certification surveys. In addition, the word "immediate" as used in paragraph 13 with respect to the final certification survey means "as soon as practicable after completion of remedial action at each specific site."

Finally, per paragraph 15, it is noted that this Memorandum is not intended by DOE to form the basis for any estoppel of the State, DOE, or the Borough of Middlesex, nor is it intended that this agreement constitute any admission of any legal responsibility for any claims whatsoever by the State, Borough of Middlesex or any third parties.

In addition, we have reviewed and would concur in the clarification of paragraph 10 provided in the letter from George Tyler to Steven Miller, dated November 23, 1979. DOE, to the best of its ability and in accordance with federal statutes and regulations, will coordinate an investigation on a state-by-state or regional basis to find appropriate sites for the permanent disposal of low level radioactively contaminated material referred to in the Memorandum of Understanding, and the NJDEP will use best efforts to locate a disposal site in New Jersey.

I, along with representatives of my staff, and others involved in implementing the remedial action program, will be at the meeting with you, or your representative, the town council and members of the public on December 18, 1979 at 8:00 p.m. at the Municipal Builiding in Middlesex. We will be prepared to discuss the Memorandum and the plans for implementing the remedial actions.

Your help and the fine cooperation from the Mayor have been invaluable in reaching this understanding. I look forward to prompt, satisfactory completion of these remedial actions.

Sincerely,

Sheldon Meyers

Sheldon Meyers, Acting Deputy
Assistant Secretary for
Nuclear Waste Management

Enclosure

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding by and between the United States of America (herinafter called the "Government"), acting through the Department of Energy (hereinafter called the "DOF"), the Borough of Middlesex, Ner Jersey (hereinafter called the "Borough"), and the State of New Jersey acting through the Department of Environmental Protection (hereinafter called "NJDEP").

WITNESSETH THAT;

WHEREAS, the Manhattan Project was commissioned by the Government during the Second World War for the purpose of developing atomic weapons, and,

WHEREAS, there is located within the Borough a site formerly known as the Middlesex Sampling Plant and most recently utilized as a reserve training center for the U.S. Marine Sixth Motor Transport Battalion (hereinafter referred to as the "former sampling plant"), which served as a storage depot and sampling plant for uranium and thorium ores from November 1943 to February 1955 as part of the Government's atomic weapons development program under the Manhattan Project and subsequently, the Atomic Energy Commission and,

WHEREAS, quantities of fill material were removed from the former sampling plant and disposed of at certain offsite properties, and,

WHEREAS, radiological surveys conducted since 1976 by Oak Ridge National Laboratory (ORNL) of the Marine Base, of properties immediately adjacent to the former sampling plant or contiguous to the adjacent properties, and of certain offsite properties have revealed measurable levels of low-level radioactively contaminated residues, constituting a potential minimal public health risk, and

WHEREAS, the parties agree that steps should be taken to eliminate this potential minimal public health risk (hereinafter referred to as the "remedial action");

NOW, THEREFORE, the parties herein have reached the following mutual understandings:

1. The DOE plans to conduct a remedial action program at the following locations subject to approved agreements with the affected property owners:
   a. The site of the Rectory of the Church of Our Lady of Mount Virgin, 650 Harris Avenue at the corner of Harris Avenue and Drake Avenue, Middlesex, New Jersey,
   b. Property at 432 William Street, located on the southeast corner of Grant and William Streets, Piscataway, New Jersey,

c. Lots 1-45A and 48-50 in Block 318 and all lots in Block 319 on the Middlesex Borough Tax Map; all lots in Block 389, all lots in Block 395, all lots in Block 396, all lots in Block 412 and Lot 1 in Block 513 on the Piscataway Township and al' such properties immediately adjacent to the Marine Base or contiguous to such adjacent property as may be found to have radioactive contamination requiring remedial action.

d. Such other offsite properties as may be determined by DOE and NJDEP to require remedial action.

2. The DOE plans to initiate a remedial action program for the former sampling plant located at 239 Mountain Avenue, Middlesex, New Jersey.

3. The remedial action program contemplated by DOE consists of the following actions designed to expedite the project.

   a. An immediate cleanup of those offsite properties identified in paragraph 1a and b above and the removed material stored temporarily at the former sampling plant.

   b. Subject to receipt of any required approvals (including compliance with those requirements provided in paragraph 9 of this agreement), the DOE plans to initiate as a second phase a remedial action program at the following locations:

      (1) A cleanup of all other offsite properties identified in paragraph 1 above and the removed material stored temporarily at the former sampling plant site, and

      (2) A subsequent cleanup of the former sampling plant and removal of all material contaminated with radioactivity to a permanent disposal site.

4. All remedial actions performed pursuant to the above paragraph will consist of the removal of radioactively contaminated material to obtain a level of not exceeding 5 pCi/gm as measured by techniques agreed by the DOE and the NJDEP or criteria established by the USEPA which is agreed by DOE and NJDEP as applicable to the condition at Middlesex.

5. In addition, the DOE recognizes that remedial action is required for that portion of the municipal sanitary landfill area which includes parts of lots 1 and 2 in Blocks 219, parts of lots 4 and 5 in Block 221 and a portion of Genese Place in the Borough of Middlesex. Any remedial action performed at this site will be undertaken in accordance with paragraph 8 below. The DOE plans to seek the necessary authority to conduct such remedial action.

6. The DOE will restore property referenced above, together with any other properties which are subject to remedial action, to a condition comparable to their original condition by techniques of backfilling and landscaping and such other methods as may be agreed to between the DOE and individual property owners.

7. The DOE plans to store temporarily at the former sampling plant all such radioactively contaminated soils and materials removed from offsite properties referenced above. Such storage shall be designed in a manner to prevent the possibility of recontamination of the surrounding area and the site shall be managed by DOE in such a manner to restrict access to the former sampling plant. Radiation levels at the former sampling plant site shall be monitored by the DOE and by the Borough of Middlesex. The DOE shall allow representatives from the Borough of Middlesex and from NJDEP access to the property at all reasonable times in order for radiation levels to be monitored. The DOE shall notify the NJDEP and the Borough of Middlesex in writing at periodic intervals, not less than twice per calendar year, of the radiation level at the former sampling plant. The Borough will be notified in writing at least 48 hours prior to any tests being made at the sampling plant site in order the the Borough may, if it desires, have one of its representatives present to observe the testing being done by the DOE. The DOE will not store at the former sampling plant, site materials, other than materials from those offsite and onsite areas specifically referenced in the Memorandum of Understanding, it being specifically understood and agreed between the parties that no contaminated materials will be brought into the Borough of Middlesex from areas other than the Borough of Middlesex and that property in the Township of Piscataway which is specifically referred to in this Memorandum of Understanding.

8. The DOE will commence remedial action and perform such action as soon as reasonably possible, consistent with the requirements of all laws and applicable regulations, and the findings of engineering and environmental analyses.

9. All DOE plans referenced in the Memorandum of Understanding with the exception of those plans described in paragraphs 1a. and b. above, are proposed actions until such time as all the requirements of the National Environmental Policy Act (NEPA) are fully met. No final decisions can be made by DOE until the NEPA process is completed.

10. The DOE has requested the active cooperation of the NJDEP in locating a permanent disposal site for the radioactively contaminated material which the DOE will remove from temporary storage at the former sampling plant. The parties recognize that such cooperation is necessary to a satisfactory resolution

of this matter. The NJDEP will use its best efforts to locate a permanent disposal site for the materials in order that the contaminated materials may be completely removed from the Borough of Middlesex as soon as possible.

11. The DOE will invite the participation of the NJDEP and the Borough of Middlesex in the referenced remedial action program specifically in the form of radiological monitoring services.

12. The Borough of Middlesex will assist the DOE in implementing the plans outlined above by relaying information to the public on the proposed project and by acting as an intermediary between the DOE and the public whenever requested by the DOE.

13. DOE will immediately upon completion of remedial action at each specific property site, conduct a final radiological site survey and after concurrence by NJDEP will issue a certification to each property owner and the Borough of Middlesex that the site meets the approved remedial action criteria as reflected in this Memorandum of Understanding.

14. All remedial action work performed by DOE and its contractors will be done at no cost to the Borough of Middlesex.

15. This Memorandum of Understanding does not in any way constitute or form the basis for any estoppel of the State, DOE, or the Borough of Middlesex, nor can it be admitted as evidence of any legal responsibility of the State, DOE, or the Borough of Middlesex for any public health risk created or otherwise, nor can it give any third parties any rights or claims whatsoever.

16. The effective date of this Memorandum of Understanding is the date on which the last party signed below.

BOROUGH OF MIDDLESEX

BY: ____________________
Martin S. Matuskiewicz, Mayor

Date: ____________________

U.S. DEPARTMENT OF ENERGY

BY: ____________________

Title: ____________________

Date: ____________________

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

BY: ____________________

Title: ____________________

Date: ____________________

BOROUGH OF MIDDLESEX

BY: Martin S. Matuskiewicz
Martin S. Matuskiewicz, Mayor
Margaret Hanania, Clerk

Date: November 20, 1979

U.S. DEPARTMENT OF ENERGY

BY: Sheldon Meyers

Title: Acting Deputy Assistant Secretary for Nuclear Waste Management

Date: December 18, 1979

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: George J Tyler

Title: Director, Division of Environmental Quality

Date: November 23, 1979

Exhibit 2

Department of Energy
Washington, D.C. 20585

November 29, 1985

Honorable Thomas H. Kean
Governor of New Jersey
Trenton, New Jersey 08625

Dear Governor Kean:

I am writing on a matter of importance to both the Department of Energy (DOE) and the State of New Jersey. The matter is the need for the selection of a disposal site for wastes in the State of New Jersey that are contaminated with low levels of naturally occurring radioactive materials.

The DOE is performing remedial actions under our Formerly Utilized Sites Remedial Action Projects at four locations in the State of New Jersey that are contaminated with low levels of radioactive materials remaining from the handling and processing of uranium and thorium ores and concentrates. Two of these sites are in the Borough of Middlesex, one site is at the Township of Wayne, and one is between the Borough of Maywood and the Township of Rochelle Park. A fifth New Jersey site is within the Dupont plant at Deepwater and has some low-level uranium contamination which will be the subject of future remedial action.

The DOE is removing the radioactive contamination from residences and commercial properties that became contaminated from these sites and has acquired all or part of the contaminated sites at Middlesex, Wayne, and Maywood for temporary storage of the wastes from this cleanup. However, the temporary storage sites at Middlesex and Wayne are not suitable for the long-term management of the wastes, and the Maywood site may not be suitable. Thus, a new disposal site is needed. The wastes from the ongoing cleanup of the surrounding properties and from the eventual cleanup of all three of these temporary storage sites is estimated at about 400,000 cubic yards. Existing DOE disposal sites in other States cannot accommodate this volume of low activity waste. Further, it is very likely that strong objections and legal challenges would occur in any State to which such a move were attempted. These factors, plus the large cost associated with moving such a large amount of material, dictate that a disposal site in New Jersey be identified. I would like your help in selecting such a site.

I understand that the State of New Jersey has a similar problem with contamination from radium processing wastes at Montclair and Glen Ridge. We further understand that the cleanup of the first 12 homes in Montclair and the shipment of the waste to a commercial disposal site in Nevada are being planned at a total cost of $8 million to the State. If the same approach is followed for the other 85 contaminated homes, the cost is estimated by EPA at over $90 million. If a disposal site in New Jersey would be available, we understand more than two-thirds of this cost could be avoided.

As noted by former Secretary of Energy, Donald Hodel, in his letter to you on February 1, 1985, the DOE is willing to work with the State of New Jersey to select and construct a disposal site in the State for these wastes and the wastes from the DOE's cleanup program. We can make available some funding in fiscal year 1986 to initiate this selection process and plan to request substantial funding in fiscal year 1987 for this purpose. Please designate a point of responsibility to work with Mr. John Baublitz, Office of Remedial Action and Waste Technology, Department of Energy (301-353-5272), to get this important work underway.

Yours truly,

Joseph F. Salgado
Under Secretary

cc:
C. Daggett, EPA Region II Administrator
W. Hedeman, EPA Assistant Administrator
for Superfund

Mr. **Torricelli**. Is this then your final judgment on the Lodi wells, that it is a local uranium problem, not the thorium from Maywood? Is this a closed issue?

Mr. **Baublitz**. The only thing that remains, Mr. Torricelli, is the monitoring around the rest of the Stepan site. Stepan itself has been monitoring wells around buried materials that are still under an NRC license and has been analyzing that data. We have only begun to analyze it, and we have not yet discovered any differences of that data from the data we have taken around the DOE storage site.

So from what we have seen so far, the evidence is consistent, but we want to look at that more thoroughly before we say a final judgment.

Mr. **Torricelli**. Let's return to Maywood for a moment. With the residential properties complete, your date for meeting the State and commercial properties, industrial properties, is 1989?

Mr. **Baublitz**. Yes, sir. That's principally due to the fairly large activity we expect associated with the Sears warehouse, that whole area.

Mr. **Torricelli**. What is your estimate on the volume of material on commercial properties?

Mr. **Baublitz**. The grand total is over 145,000 cubic yards. I don't have a breakdown. Maybe one of my colleagues does.

Do you have a breakdown on commercial versus residential?

I guess we don't have it. We can provide it for you.

Mr. **Torricelli**. Can you provide us a breakdown of what is out of the ground and what is still in the ground?

Mr. **Baublitz**. Yes.

[The information follows:]

ESTIMATED VOLUME OF MATERIAL ON RESIDENTIAL AND COMMERCIAL PROPERTIES

Maywood/Rochelle Park/Lodi, New Jersey

	Cubic Yards	Percent of Total
1. Now On-Site		
Residential	5,200	15.6
Commercial (North Ballod)	28,000	84.4
Total	33,200	100.0
2. At Completion of Interim Action (Phase 1)*		
Residential	6,200	5.2
Commercial	118,800	94.8
Total	125,000	100.0
3. At Completion of Final Cleanup (Phase 2)		
Residential	6,200	2.3
Commercial	265,800	97.7
Total	272,000	100.0

* Waste buried onsite at the Interim Storage Site, on Stepan property, and under New Jersey Route 17, will not be excavated until final cleanup and removal to a new disposal site (Phase 2).

Mr. **Torricelli**. Can you establish a ratio formula of how much has been taken out versus how much still remains in the ground?

Mr. **Baublitz**. We have in storage right now about 30,000, a little over 30,000 cubic yards. The grand total is over 140,000. So we have 30 out of 140.

Mr. **Torricelli**. So there is another 100,000 in the ground?

Mr. **Baublitz**. Yes, sir.

Mr. **Torricelli**. Now, we are looking at a 1989 date, and we are hopefully looking at removal directly to a permanent site?

Mr. **Baublitz**. Obviously, that depends. If there is such a site available in that timeframe, that certainly would be our preference. Double handling, of course, is more expensive?

Mr. **Torricelli**. That is the hope.

Mr. **Baublitz**. If such a site were not available, we would have to use the temporary site.

Mr. **Torricelli**. Now, let's talk about the Lodi residential properties for a moment. We are talking about approximately 30 residences?

Mr. **Baublitz**. To date we have designated and cleaned up eight. There are additional properties that are currently being evaluated. We should have the results of those evaluations early this spring.

Mr. **Torricelli**. Is it posssible yet to know the volume of the material in the Lodi residential properties?

Mr. **Baublitz**. No, because we don't have any real data yet. On the other hand, it is typical for residential volumes to be rather low compared to the commercial volumes.

Mr. **Torricelli**. Let me just share my view with you. Our understanding with the people of Maywood and the leadership of that community has been that where there were a few residences outside of the community boundaries, where it was clear the material had come from Stepan Chemical in Maywood, that Maywood would accept that volume of material into their temporary storage site.

That agreement may no longer be relevant because we can now, depending on the volume of material defined and whether in fact there are another 20, 30 residential properties that are contaminated, we may be talking about the need for an additional temporary storage site in my judgment.

I think we are approaching the limit of what we can ask the people of Maywood to accept from other communities since we seem unable to set any boundaries on how much of this material we are going to find in other communities.

Mr. **Baublitz**. That is a very important point, and we have recently discussed the need to begin discussion again with the local officials, what we know and when we expect to know more so that we can proceed as expeditiously as we can to clean up all the properties we find. There is an important distinction I would like to make, I think it's relevant to the discussion today.

The material that we are dealing with, thorium principally, similarly with uranium contamination, the hazard we worry about is associated with the decay product radon, as you well know, which is in fact a decay product of radium, which itself is a decay product of thorium and uranium. The reason radon is a problem is because it tends to build up inside structures.

Radon is a naturally occurring radionuclide that is prevalent around the Earth because of the natural concentrations of uranium and thorium in the Earth's crust, and when it's occurring that way radium comes out as a gas and disperses in the atmosphere and causes no problem.

The problem arises when one builds a structure or on such a deposit. Because of the ventilation arrangements in a building where there is less, far less than 100 percent recirculation, the radon level tends to concentrate, and because of the nature of the radon decay itself it poses a risk from the point of view of lung exposure to alpha radiation, which can be predicted to increase the instance of lung cancer.

This risk is one that occurs over a very long period of time. EPA and others have done analyses of these kinds of risk, and the risk is measured in terms of decades of exposure. The risk disappears when the deposits are removed from around the structure and radon levels are therefore allowed to go back to normal.

Mr. TORRICELLI. The first time I heard about this Maywood problem, Mr. Daggett's predecessor and I went to Maywood. She was explaining to me in front of a family this really was not a problem unless you had continuous contact for 20 years and therefore my mind should be put at rest. I asked the lady in the house in front of us how long she had lived there, and she said 30 years. So I'm sensitive to the fact it takes a long time of association for there to be any danger.

Nonetheless, concentrations in such a congested area inevitably would lead to that long-term contact. My question, Mr. Baublitz, is the State government in recent days exhibits some imagination in talking about using the radon contaminated material in a mix for road construction in a 15-to-1 ratio. That would be a safe use of the material. Is that—describe for us differences in the thorium verus the radon. We would be happy to donate some of our own material.

Mr. BAUBLITZ. Let me come back to that and just finish my thought because it's quite relevant to this business of temporary storage.

The point I was leading up to was that once removed from around the buildings, once removed from the foundations and underneath the buildings, if it's only moved across the street, the hazard is still removed.

The pile—a pile, any pile sitting anywhere, the ones we have currently at Maywood and similar ones at Wayne, a similar one in Middlesex, when they are sitting in that condition under control the hazard has been eliminated.

It is an important point to make because the concern of all the people involved is one that suggests their exposure hasn't been removed until the pile leaves their site and leaves their visible range, leaves the community, and although we fully appreciate the significance of that concern, people have by knowing it's, still there, it is in fact a scientific technical fact that under those conditions the hazard has been removed.

Mr. TORRICELLI. Only if it remains under strict supervision and it's contained. The history of the Maywood site is the material has traveled through wind or water or other means.

Mr. BAUBLITZ. That's very true.

Mr. **Torricelli**. So while your analysis is perfectly fair, it is important that people in Maywood understand the immediate danger has passed, that they are no longer in any imminent danger of exposure to this material. We nevertheless have a long-term problem to deal with.

Mr. **Baublitz**. That's right.

Mr. **Torricelli**. And that is because we cannot assure that any covers or containers will work in future decades, over another generation, we have to face the long-term problem, which is what we are doing.

Mr. **Baublitz**. Certainly. And of course the Department accepts that responsibility by taking custody of the material for as long as it takes. Let me answer your question——

Mr. **Torricelli**. Let me broaden it.

There is a State proposal for refusing the thorium material and having it removed for use in construction projects where it would be in the open air and pose no danger. It has been raised previously thorium could be dumped at sea where there are already high natural levels of radiation, there would be no perceptible impact of dumping that material.

How far is the Federal Government, in contrast to the State government, looking at any of these alternatives and will the study that you are about to release go this far?

Mr. **Baublitz**. The Department of Energy has been interested in sea disposal for some time. We looked and funded studies of that alternative for some of the material several years ago and found, to our satisfaction at least, that technically speaking for the kinds of material that we are dealing with in New Jersey, the ocean disposal option would be perfectly safe.

The reason we are no longer pursuing that actively is because of the current legislative climate where ocean dumping of any kind requires an EPA permit and the law as we understand it is that for a permit to be approved, it must be specifically approved by both Houses of Congress within some period of 90 days, and in addition there was a discrete moratorium for some 2 years that prevented any consideration of dumping other than for research and development purposes.

Under those circumstances and with the urgency that we feel to get on with the program, we have simply set aside that option as currently impractical until the legislative climate changes.

Mr. **Torricelli**. Let me say to you, Mr. Baublitz, that your political analysis may be correct, but that is technically, absolutely irrational. Most areas of seabed would find themselves to be more radioactive than the material you would be dumping, where the levels are so high in the water as it is.

Mr. **Baublitz**. That is what our studies have shown also.

Mr. **Torricelli**. There is actually a very good point for the case. This country has lost two nuclear submarines. When measuring radioactivity in the area of loss 10 years later they could not even detect they were lost. That was high grade uranium, not this low grade material.

Nevertheless, I think your evaluation is probably right, though. If we continue to have frustrations either—I believe Mr. Tyler will comment later on the regional compact for disposal of the material in our area—if we continue to fail and have no access to Federal sites we may have no alternative but to return to this option no matter how difficult.

Mr. BAUBLITZ. I might return to the other aspect of your question with regard to the, as we understand it, the State's idea of investigating mixing this low activity radioactive waste with clean soil to reduce it to the levels below the concentration limits and then disbursing it I guess in various ways. There again technically from a safety point of view I'm sure that would be perfectly safe.

I can't really comment on the degree to which that would be considered viable from a regulatory point of view. It sounds analgous to procedures that were in effect many years ago for gaseous effluents, so-called dilute and disperse, which were specifically done away with as not being an acceptable method of treating or handling radioactive effluents.

Mr. TORRICELLI. Do you consider the properties of thorium similar enough to the radon that as a general proposition, recognizing to the extent this would have to be studied and that the ratios might have changed with respect to clean materials, but as a general approach the properties are similar enough between the two materials that this is a concept we are looking at?

Mr. BAUBLITZ. Absolutely. If it's acceptable for the radium wastes——

Mr. TORRICELLI. If the State finds—then in your judgment they're probably acceptable also for thorium.

Mr. BAUBLITZ. There would be no technical difference.

Mr. TORRICELLI. Mr. Daggett, excuse me. I have to maintain control because we're keeping a record. I assume the ratios——

Mr. DAGGETT. I was just asking whether or not the ratios aren't indeed significantly higher than we are talking about in West Orange. I believe from what I understand anyway they are. I'm not sure if that's accurate or not.

Mr. BAUBLITZ. We can give you a more detailed response on that.

Mr. TORRICELLI. I have to note that I've been looking for a reason why it would make sense for Governor Kean's proposal to expand the New Jersey Turnpike, a $2 million expansion. For the first time I've seen some justification.

Is there anything further we should know about the Maywood site?

Mr. BAUBLITZ. We have covered all the points——

Mr. TORRICELLI. Are we still in good financial condition?

Mr. BAUBLITZ. Yes, sir. The effect of Gramm-Rudman in fiscal 1986 has not hurt us. The site as well as some of the others remain at the top of our priority list.

Mr. TORRICELLI. I've promised in a previous year not to return for more money for the Maywood site for the Department of Energy budget and lied. Will it be necessary for me to lie again? Do we have enough money?

Mr. BAUBLITZ. We have enough money for this fiscal year, yes, sir. We will be requesting additional funds in 1987, 1988, and 1989.

Mr. TORRICELLI. It is at least good to give notice. Thank you.

Mr. Tyler, if you have a prepared statement, we will enter it into the record, and I would like to hear any comments or summary you might provide.

Mr. Daggett, Thank you for being with us.

Mr. TYLER. Congressman Torricelli, thank you. It is a pleasure to be here. As you noted, I'm George Tyler, assistant commissioner in the Department of Environmental Protection. With me today is Dr. Jorge Berkowitz who is the Administrator of our Hazardous Site Litigation Administration.

I very much appreciate the opportunity to be here today to review with you the direction privately funded cleanups are taking in New Jersey, in addition to reviewing the actions taken in some major hazardous waste sites located in this State's. Hazard ous waste management is clearly one of the most critical environmental issues we face.

In the second decade of intense environmental consciousness New Jersey, along with most other States, faces a major challenge in addressing hazardous waste sites.

New Jersey's hazardous site cleanup program has been moving forward at a very rapid pace. Many of our first phase feasibility studies and engineering designs are nearing completion and construction and actual cleanup efforts are soon to be underway on dozens of sites. New Jersey has been and will continue to be the national leader in the area of hazard site cleanup.

We have been there since the inception of Superfund in 1981 and in fact since the creation of our own spill Compensation and Control Fund in 1977. We've attacked the problem from an enforcement, regulatory, and a private responsible party viewpoint as well as the use of both State and Federal funds. In the past two years remedial action was taken at more than 300 hazardous sites in this State.

In Federal fiscal year 1985 alone $174 million was committed to toxic waste cleanup projects. This figure includes both State and Federal funds as well as responsible party commitments. Furthermore, action has been initiated at over two-thirds of the New Jersey sites included on the national priority list.

The department has completed 34 remedial action feasibility studies at 28 sites, with another 44 underway at this time. We've completed 29 designs at 24 sites and we've completed construction steps on 30 sites.

Just speaking about the 97 sites on the national priority list, we've another 26 projects underway at this time.

The biggest impediment to continued progress in this area is the absence of a Superfund reauthorization. We desperately need a dramatically expanded Superfund. I cannot emphasize strongly enough the need for Congress to act and act quickly to pass an expanded Superfund reauthorization bill. The lack of Superfund legislation is the greatest uncertainty we face in planning our cleanup program. Because of the absence of a Superfund reauthorization, for example, EPA has already determined Federal funds will not be available as planned for projects involving at least 10 New Jersey sites.

To avert any delays at these sites because of inaction with regard to the reauthorization, New Jersey is in the process of advancing State funds to EPA for those affected projects. As you can see, we are committed to keeping our program moving. However, we will not be able to replace all the Federal funds that we have learned might be missing without a reauthorization bill. Soon major delays will occur in New Jersey and through the country.

In discussions with your staff we learned of your interest in reviewing the use of innovative technologies in the cleanup program. I think I would just offer one thought at this point. That is that there is inherent conflict built into the law that perhaps the Superfund reauthorization will remedy, and that is the conflict between advancing cleanups ahead on a cost-effective scheduled basis while at the same time applying innovative technologies to those same projects.

I believe in the conference committee there will be an ability for the Congress to adopt the House language on research and development projects which will be a substantial step forward in giving EPA the legal authority to defer certain actions and to move into a research mode rather than a cleanup mode, using standard technologies. I think that's important.

I think perhaps even further legislation might be necessary to make crystal clear that EPA has that right, especially, for example, with responsible parties.

We have in New Jersey a very innovative law known as the Environmental Cleanup Responsibility Act, the shorthand for which is ECRA. Under that program we have a very substantial legal lever. That is, an ability to void a sale if a site has not closed in compliance with ECRA. Based on that we have been able to extract in negotiations conditions where responsible parties or actually people who are closing or selling companies an agreement to use innovative technology experiments while posting performance bonds together with a more conventional form of cleanup should the innovations fail.

Basically that's not an issue we have had to force with a very big club because the industries involved have been very willing, in fact, have sponsored our suggestions on many occasions. I just wanted to note that and then note in closing that the sites you selected, because they fall into this area of the State, nevertheless, give a graphic picture of the type of multifaceted cleanup program that we must run and I think all States and the Federal Government must run.

We have three or four cases that are enforcement driven, two with Federal enforcement, one with State enforcement. We had one or two—depending on how you count the Lodi well field—being managed by the Federal Department of Energy, and you have one of the last, that is the publicly funded using State dollars at the time and hopefully eventually Superfund dollars.

So you see the combination of funding strategies and enforcement strategies that now you need to be focused on to make the cleanup programs work.

At this point I'll try to answer your questions on any specific sites. I thank you again for the opportunity to be here today and thank you personally, Congressman, for your help to my department on a number of the sites that we will be talking about today, particularly Fairlawn and the Department of Energy's. Thank you.

Mr. TORRICELLI. Thank you, Mr. Tyler.

Let me say, too, that one of the proudest aspects of, I think, of our State today is that in Democratic and Republican administrations, the depth of environmental protection has become a model for amendment.

I am not sure it has an equal in our country. You performed remarkably well and continue to have the highest caliber of personnel that I have seen in the country working on environmental matters.

You are managing, of course, several sites in this area. Let us try to review them.

First, Mr. Daggett's testimony, the State has mentioned in passing about our continuing frustration with the Carlstadt site, perhaps the most dangerous of the environmental sites in Bergen County, not because of what we know but because of how much we don't know. We seem to know less about it than any, at least with what I am familiar.

If, in fact, Mr. Daggett pursues as a strategy next month and goes the Superfund route and begins a cleanup and seeks to settle matters with the corporate parties responsible, later there will be a matching requirement by the State.

Have you had to look at this issue yet of a State role beginning with the Carlstadt cleanup, in fact, we don't wait for the corporate parties to take responsibility?

Mr. TYLER. We have made a standing offer, if you will, to the regional administrator of region 2 that, if indeed, Federal funds are a problem with any particular site—and that would be the case, that might be the pledge, if you will, in the SEP case in Carlstadt—that we will, to the limit of funding available to us, advance funds to EPA for that.

So, I don't see a resource constraint on the State for that particular site.

Mr. TORRICELLI. You are prepared to respond to the Federal Government's offer if they decide to use the power available to them?

Mr. TYLER. Yes. If they would manage the project of using their staff for technical support, et cetera, New Jersey would write the check.

Mr. TORRICELLI. Thank you.

Kearny—if the Federal Government has a special responsibility for Maywood, and it does, because its contamination came from the war efforts, World War I and World War II, the State government has a particular responsibliity to Kearny since the radon soil in Kearny was neither nationally produced nor of any benefit to that community industrially when it occurred, but has been transported there, presumably on its way out of New Jersey, and it has never left.

Could you discuss where we are with this problem now in light of what I have heard the State government looking at new options for the radon material?

Mr. TYLER. All right. I will attempt to summarize the rather lengthy history, but the material in Kearny, I should say as a preface, presents no health risk to anyone.

It is stored in containers. It is perfectly safe. It is not even in the least safe, but by no means dangerous situation of the storage piles that we have at Middlesex or Maywood.

It is in drums inside of tractor trailers or other kinds of larger containers. There is an incredible amount of shielding considering the fact that we are not dealing with very high levels of radioactivity to begin with, and it is, as the Department of Energy has testified today, sufficient in terms of health hazard to remove the soil from around the structure preventing the emission of radon gas from entering the structure and building up unsafe levels that put the material into a perfectly safe condition.

It is stored there, and I know it represents a nuisance of sorts, but it does not represent a health threat in any way.

I wanted to make that very clear.

Mr. TORRICELLI. I think, by the way, the community has understood that, and the community has been cooperative. No one has been claiming that it represents any kind of an immediate threat.

In fact, it does not, but rather that contaminated materials tend to be magnetic. They attract other materials, and what is today a transportation site becomes tomorrow's dump site. That is the concern.

Mr. TYLER. We have committed to removing that material or removing the project as quickly as we can, and I think a quick review of our legal initiatives in Federal courts, and perhaps as you referred to earlier, some of our initiatives with the Federal regulatory agencies, would make that patently clear.

We have obtained permits for the only licensed disposal facilities in the country that can handle this type of material, if it is treated as waste as it is excavated from the site. We have obtained initial permission from both receiving States and, in fact, almost a letter of compliment from the State of Nevada at one point as to how thorough our monitoring plan was and our preparation packaging plan was and shipped this material from New Jersey to Nevada.

Again, we are not doing anything different on these sites [1] than any other Superfund site in seeking distant disposal facilities.

You heard reference earlier to the Quanta waste being on line to be incinerated at licensed PCB incinerator capacity where it exists.

I think it exists in Chicago and Arkansas and Louisiana. It doesn't exist in this part of the country. No one thinks twice about shipping that waste to the licensed capacity. There is often a criticism, if you will, of the plan to take the waste to Nevada or to Washington.

Nevertheless, that was the plan. My department did obtain the permits for that waste, and as part of that, we signed a contract with the Union Pacific Railroad to move the waste from New Jersey to licensed capacity in Nevada.

It was necessary to, in loading the railroad cars for the long trip, to have a site to do that, and the railroad that was available in Kearny made a perfect transshipment site and was, in one sense, just more commerce moving through that railroad operation.

What happened then, was that the State of Nevada, we think arbitrarily, capriciously, and with great disrespect for the merits of the situation, said, "You can't bring it into my backyard." They said that even though the facility that we were taking it to told us this would have been the lowest activity material received. It was a high volume but very low level, no hazard whatsoever.

---

[1] Montclair and Glen Ridge.

Based on that, a number of lawsuits ensued—I should back up and state that the city, county and State government, including their version of the public utilities commission in Nevada, all passed emergency regulations which gave us additional hurdles to go through in accessing that site at the last minute and then a few days of when the shipments were to have started, which is why the shipments were stalled at Kearny.

We went to court. We moved into the Federal District Court in Nevada, the State resisted. The Federal judge basically said the matter belonged before the U.S. Supreme Court. We moved through Washington and filed our briefs with the U.S. Supreme Court. They agreed to hear the matter, although not on the expedited basis we asked for, and I believe a subsequent decision in that case will be coming up in the next week or two. I will check with our attorneys and get you that specific information, but in the next, I believe, 10 or 15 days, one of the issues will be before the court again.

At the same time, an individual, since then in Montclair who is out of his home and obviously aggrieved by Nevada's action, filed a separate suit in a Nevada court, an expeditious hearing was denied, and the matter is still under review by the Federal District Court there in Nevada.

While I am at it, I might as well mention before we got into the long-term options, New Jersey did look for an interim disposal site, so at least the first phase of the cleanup in Montclair could have gone forward.

We identified a location in West Orange, at the West Orange National Guard Armory. There was an enormous outpouring of opposition from both the local officials and citizens. As a result, that option was not followed through on, so that put us in the mode of moving immediately to a longer term Nevada-Washington State situation.

We also pursued, by the way, although not in the courts, the use of a Washington State site as an alternative to Nevada. Washington officials have let us know in no uncertain terms we will be in court if we exercise that option.

More importantly, unfortunately, the owner of the Nevada site is the same company who owns the Washington site, and they are not going to do business with us in Washington based on their experiences, none of which has anything to do with the risk imposed by this material.

Mr. Torricelli. Now, we understand each other. There is no intention to move additional material to Kearny for transportation until an ultimate disposal site is found?

Mr. Tyler. That is right. I don't think there is any more physical space at the Kearny location. We have said that. I believe, Commissioner Hughey said that on occasion, he had no intention of leaving material there this long, simply, again, the rather silly actions of Nevada officials that have put us in this predicament.

As a result of that, perhaps gratuitously in retrospect, we have begun to explore some of the innovative techniques that perhaps were being talked about earlier this morning. One of the things we propose to do, as you indicated a little earlier, is to bring this material to a mixing plant and mix it with soil and blend it to background.

Since we are not dealing with, in a sense, an artificial contaminant here, but dealing with a naturally occurring substance, radium, we thought we could accomplish that without violating any of the principles of dilution——

Mr. TORRICELLI. Is this a concept or a proposal?

Mr. TYLER. I would say it is approaching a proposal at this point. We have had an engineering study done, a very quick and dirty engineering study, to give us the parameters of a mixing operation.

We have convened a group of scientific experts from the academic and scientific community of New Jersey who, I should note, are rather supportive of the idea but wonder why we are bothering to blend the material, because they consider the levels so low in the first place, but——

Mr. TORRICELLI. Is DEPS's endorcement awaiting this continued review, or are you yet saying this is the——

Mr. TYLER. We are pursuing this from a technical analysis viewpoint right now.

Mr. TORRICELLI. This raises the question, if good for radon, good for thorium. There is an obvious need since the other avenues are being frustrated to deal with the thorium problem to do a technical analysis of the kinds of ratios that would be needed. So, it would be practical to use the thorium, as well.

Mr. TYLER. It is certainly something we can look at as a tangent to the original concept.

Mr. TORRICELLI. Let us do this. I will then formally communicate to the Department our hope they would undergo the same review process for the thorium in Maywood and Lodi as is being undertaken for the radon.

Has the State looked at sea disposal of the material?

Mr. TYLER. Not in any technical sense. A review of some of the literature that is available has led us to almost the same conclusion the Department of Energy put forth a little earlier today.

We do have some concerns with possible food chain uptake of radioactive materials that might creep into that kind of analysis and would have to be addressed before that was seriously undertaken, but I think I agree with the comments of the Department of Energy that as a practical matter there is no point in doing all that research.

Mr. TORRICELLI. Let's go through the remaining State sites, the Fair Lawn wells—I have read about the successes and frustrations of the corporations involved.

When do you expect to receive a new proposal?

Mr. TYLER. Just to go through where we are very quickly, we are in a situation with four contaminated wells—four wells, four municipal production wells that are contaminated or shut down while we are designing and beginning construction of a treatment system, so that the water supply will be restored to its purity and delivered to its customers in the community in the sense that it was before.

At the same time, the expenses for that water treatment system and construction project and any additional costs that are being realized by the borough of Fair Lawn at this time are being underwritten by the responsible parties, the two corporations.

In addition, the one company, the Sandvic Corp., has completed a surface removal and drum removal of its site, which has probably eliminated the majority of the source at that site.

Mr. TORRICELLI. Only one of the two has currently come to agreement with you about your signing the letter of credit for the full costs?

Mr. TYLER. I am not sure about that. I would have to check on that for you. I can tell you that is probably the case, because we haven't agreed with the other company as to what the full scope of work will be yet.

Mr. TORRICELLI. My understanding is that Fisher has agreed, and Sandvic you are still negotiating?

Mr. TYLER. From a technical viewpoint, I am still negotiating with Fisher Scientific. They have more of an on-site contamination problem, as I understand it, and we received the scope of work several weeks ago for a ground water decontamination program at that site.

We made technical changes in it known to the company, and they owe us a revised technical cleanup plan for their site by the 24th this coming February.

Mr. TORRICELLI. The 24th of February?

Mr. TYLER. Yes. I would assume perhaps they have signed the letter of credit without having that, and Sandvic hasn't, even though——

Mr. TORRICELLI. That is my understanding.

Mr. TYLER. I would have to verify that for you.

Mr. TORRICELLI. How long then is this process going to take once the letters of credit are signed?

Mr. TYLER. There is really no way to predict how long the ground water cleanup is going to take.

Once the consent agreement modification, letter of credit and all of the procedural issues are out of the way, it would take, typically, a matter of months to install a pumping system, then to pump and treat groundwater until it was certifiably clean, the department could take as long as a decade.

Mr. TORRICELLI. Would you expect to have the construction of that facility and a working agreement in place in 1986?

Mr. TYLER. I would expect that based on the fact that if we can reach agreement by February 24 on what has to be done, it should be another month or two at the most for the procedural issues to be ironed out and for the work to begin.

Mr. TORRICELLI. In the interim, for the people of Fair Lawn there is no additional cost, because the replacement water is being paid for by the companies.

Mr. TYLER. That is correct.

Mr. TORRICELLI. Generally, you don't seem concerned about the one company with whom you have not yet reached agreement. Is that because they have been cooperative to date; you are assuming you can work it out?

Mr. TYLER. Yes; I believe that—I think once the technical game plan is agreed to, I think we will work out the rest of the details without any problem.

Mr. TORRICELLI. Let's talk for a moment about Mineral Oil Products in East Rutherford, 85 acres, 4.5 million gallons of waste solvents and chemical wastes.

I have been to the site and know it fairly well. Perhaps you can describe where we are with the company.

Mr. TYLER. There have been several extensive investigations as to the contamination with regard to this site. UOP has been a fairly cooperative and responsible party. They have installed monitoring wells and have done extensive sampling in 1980 and again in March 1981. They employed a consultant to do a hydrogeologic investigation of this site.

We signed a consent agreement with UOP in 1982 which set forth a rather extensive ground water and surface water monitoring program, and we have required, in addition, submittal of information on where all landfills, lagoon and storage tanks might be located and what they might have contained when they were in operation.

That was finalized in July 1983. As far as I know, by December 1985, in compliance with the order, UOP had finished all of the sampling and submitted data on contamination of soil, ground and surface water.

The exact extent of the contamination has not yet been precisely defined, but we are—in our view, we are reviewing their hydrogeologic report at this time. We will be meeting with them this month to agree on the contents of the report or disagree, but probably agree on the contents of that report and to hopefully agree on a strategy for implementing remedial action, which would be the next step.

Mr. TORRICELLI. We are facing the possibility of additional research to the extent of the contamination?

Mr. TYLER. Just to complete the thought, I would expect out of our scheduled meeting for the end of January to come out with both a remedial action program and any additional study, work, our scientific work that might have to be done.

What I was going to say was that on the sites there is always a need for more information, and our staff always identifies it much to the chagrin of those of us who want to close the deal and get on with the next site.

So, typically, we would come out with a remedial plan, perhaps another set——

Mr. TORRICELLI. Do you know enough yet to know about the movement of the materials as it relates to the ground water?

Mr. TYLER. We have that under review right now. I can't comment on it at this point in time. That study is being looked at by our geologic survey and our scientific staff.

Mr. TORRICELLI. That, of course, is our great fear and has been for some time. Has the company been asked to reach a determination on that issue?

Mr. TYLER. Oh, they have submitted a hydrogeological report to us, and that is what our staff is looking at right now.

Mr. TORRICELLI. That would contain samples of the water from Wallington, Rutherford, towns in there?

Mr. TYLER. I would expect it to contain samples of the water from monitored wells on-site and immediately off-site. I don't know if it will contain water samples from neighboring communities, however——

Mr. TORRICELLI. Well, help me establish a better time line. Assuming that you need some further research, it is probably a good assumption—are we talking about actual treatment or construction on the site in 1987?

Mr. TYLER. It is very, very difficult to speculate as to the outcome of an enforcement negotiation, but I can speak in general terms and say typically what I would expect out of a meeting like we will be having at the end of the month, and I don't know if representatives from DOE are here to hear our side of the table——

Mr. TORRICELLI. They are.

Mr. TYLER. In that case, I will temper my remarks. I would expect to have a meeting like that to agree on a game plan for remedial action that is obviously necessary and, again, a strategy for any additional sampling we then might think is necessary.

If it is a typical site, work on the first steps can usually begin rather quickly.

Mr. TORRICELLI. This is, of course, a Superfund site. Do we generally agree if this year comes and goes and there is still no agreement, you would then be open to using the full powers of the Superfund to settle the responsibility——

Mr. TYLER. Yes. Yes, with an important caveat. I was going to mention this earlier. I don't know EPA is in the same position as the State of New Jersey to put its money on the table and say, if you don't perform, we will.

We are blessed in this State, as you mentioned earlier, with a wide and bipartisan concern for the environment, so we have in our budget some $150 million from the State legislature and Governor that is not part of the Federal Superfund Program, nor is it part of the Spill Compensation Fund, so it is not subject to any challenge of preemption.

We have set aside $5 million of that money we haven't had to use yet, but which we use to leverage responsible parties in enforcement negotiations, and at some point in time, to set a deadline for action.

Mr. TORRICELLI. This is a fairly high priority site, though, to attract Federal Superfund——

Mr. TYLER. There are a lot of factors that enter into when you put that deadline in place, and one of them is certainly the priority from an environmental contamination viewpoint.

Mr. TORRICELLI. Let's establish it this way for the purpose of our understanding each other. This has always been a hopeful site, in my estimation, because it was on a priority list that at each level of government is a cooperative company, and it appeared we had some knowledge of the site.

And given all that information, it made me hopeful in 1983. I am still a believer in 1984, worried in 1985, and bordering on disturbed in 1986. If this year comes and goes and we still can't get a working agreement toward a solution, we have to look at other powers.

I agree with your analysis on how this year should proceed, but there are reasonable limits even among cooperative people.

Mr. **Tyler**. I think I agree with what you said precisely, and I don't want to predict the outcome of our continuing discussions with UOP in negative way, or positive way, for that matter.

Mr. **Torricelli**. Let me then ask about the last DEP site which is at Berry's Creek, Ventron, VESCO site, Wood-Ridge, East Rutherford and Carlstadt, 40 acres on Berry's Creek.

I either had the good or bad fortune to go through it in a canoe last year. At least the bottom of the canoe survived the trip, but nevertheless, 50,000 gallons of mercury are on the site.

Tell us a little bit about where we are with it.

Mr. **Tyler**. Where we are is a long way from a final solution. One of the reasons we are a long way from a final solution is that the site itself is one of probably—I don't want to say most—but one of the most technically complex situations that we are going to find.

The litigation that was referred to earlier involved both us and the Ventron and VESCO companies for a number of years, nearly 10. In fact, I think preempted or prevented an ability on the State or Federal Government's part from using Federal moneys any earlier than we did apply to Superfund for a listing of this site, which was in 1984.

I believe the Supreme Court had in that year, ruled in our favor, sustained our legal action and our use or threatened use of the NJ Spill Fund for that site.

The site was listed on the national priorities list in 1984. During the time that has passed since then, we have agreed with the responsible parties and with some comment, considerable comment, from the Hackensack Development Commission and the Army Corps of Engineers, as well as from the EPA, because of the nature of the site on a full scope of work for the cleanup of that site, actually for the investigation of the need to clean up—of the nature of the cleanup necessary and the type of cleanup that would be necessary.

And that agreement is basically being managed by my department with an advisory committee of all of the responsible parties, EPA and the Army Corps of Engineers. The responsible parties are paying the full costs of the project.

Mr. **Torricelli**. The study has now been undertaken.

Mr. **Tyler**. It will begin actually, I think, in the next month or two.

Mr. **Torricelli**. This is to determine not the extent of the pollution but the engineer designs that might be necessary to contain or solve the problem?

Mr. **Tyler**. It is not designed for the remedial action, but it is to further refine the knowledge we have of what is at the site and what the proper remediation technique might be.

Basically, as I understand the site, there are several hundred tons of potentially—several hundred tons of mercury discharged into the site over the life of the companies that operated mercury processing plants there that is largely covered or contained by construction that took place in the early 1970's. We have been doing perimeter-type monitoring for, I guess, 8 to 10 years around that site, and thus far the mercury has not become mobile in the ecosystem and is not yet threatening the acquatic organisms with bio-accumulation, which is the fear——

Mr. **Torricelli.** It is well settled and covered. My understanding of the site is we faced a difficult choice of leaving dangerous material in the ground or the real possibility of making it more dangerous by trying to take it out of the ground.

Mr. **Tyler.** That is a fair statement; yes.

Mr. **Torricelli.** This is, I guess, in anyone's estimation, a problem that is going to be with us for many years, to determine the extent of contamination and then reach the difficult choice of whether we should try to solve it.

If we decide to solve it—the way I sort of saw it—a very large engineering problem of trying to remove it without contaminating all of New York Harbor.

Mr. **Tyler.** That is right. Then, if we do try to remove it, with tongue in cheek, we will have to find a place to put it which will not be the easiest task, either.

Mr. **Torricelli.** I have noticed the people in Kearny and Maywood have.

Is there anything else on the various State sites you would like to add?

Mr. **Tyler.** I appreciate the opportunity for further discussion. I would just like to again thank you for your efforts on our behalf over the years and say that we stand ready to cooperate with you and to communicate with you on any of the details in these sites as they evolve.

Thank you.

Mr. **Torricelli.** Thank you, Mr. Tyler.

For the sake of the stenographer, who at this point must have heard more than he could possibly ever want to know about environmental protection in New Jersey, we will take a 15-minute recess, at which time we will hear from local and corporate officials.

Thank you very much. Recess for 15 minutes.

[Recess.]

Mr. **Torricelli.** If Mayor James Panos would come forward, Mayor Gorab of Wood-Ridge, Mayor Henry Hill of Kearny, Mayor Bernard Hersh of Fair Lawn, Councilman Rich Potter of Rutherford, and Doris Mahalick from the Board of Freeholders.

STATEMENTS OF JAMES PANOS, MAYOR, BOROUGH OF MAYWOOD; HERBERT GORAB, MAYOR, BOROUGH OF WOOD-RIDGE; HENRY J. HILL, MAYOR, KEARNY; BERNARD HERSH, COUNCILMAN, BOROUGH OF FAIR LAWN; RICHARD POTTER, COUNCILMAN, BOROUGH OF EAST RUTHERFORD; DORIS MAHALICK, BOARD OF FREEHOLDERS

Mr. **Torricelli.** Bernard, let me first apologize to you for calling you a mayor. It can only lead to people calling you in the middle of the night complaining about it. In Maywood it leads to some nasty calls.

Thank you for joining us, and I thank you, too, for your patience. I know you have had to wait. My having the State and Federal representatives speak first was not in any way listing of their priority relative to the mayors, but rather I thought it would be helpful and useful for you each to hear their explanations of these sites.

I hope it was helpful to you, because that is the reason for these hearings, not merely education, but to try and establish for the communities the locations of the various sites, the problems to date and what we can expect in the future.

One of the things that I found when I was first elected in 1982 is how little knowledge that there was in each community of very real problems mayors, local officials, members of the community were living on top of very real environmental problems and didn't know they existed.

One of the things we will do after this hearing is I will take a record of it and send it to community leaders, government and industries, civic affairs in each of our towns so that they better understand the extent of these problems and what we need to do to alleviate them.

So for that, I thank you for your patience and very much appreciate your patience today and your continued cooperation in these problems.

If we could, I would like to hear a statement from each member of the panel. I think it would be helpful to me and important to have in the record.

Do understand you can submit a full prepared statement that will be in the record in its entirety, and then if you would like to summarize it and provide any additional comments, please feel free to do so, knowing that your complete comments will be in the record.

Mrs. Mahalick, thank you for being with us today as a member of the Board of Chosen Freeholders in the county, and, of course, as a candidate for county executive. We look forward to hearing from you.

Mrs. **Mahalick**. My distinguished Congressman, I am very pleased to see you today and have you conduct these hearings that are very important to us in Bergen County. Of course, I think you have been leading the fight for us in Washington; and it is good that you have come down from the Washington tower to the halls in Bergen County to hear about our problems more closely from our distinguished mayors.

I am very pleased to represent the Board of Freeholders and certainly the county, and the mayors that are here and council people certainly will be talking specifically about their areas. I would like to just touch on the whole question of this time bomb that is ticking away on us.

I did hear some of the testimony today, some I was pleased with, some very disappointed in. I think it is important for us now to be more assertive and apply some pressure so that we can get some remedial action on these things.

I don't know of anyone who has done more to do that than you, Congressman, and I am pleased. And I know, as you have said this morning, you will be doing a lot more of that.

There are a number of towns—Maywood, Fair Lawn, Wood-Ridge, Wallington, Carlstadt, Lodi, Edgewater—a number of towns that are affected in this county, and there is silence not from the mayors here but maybe a little more interest on the part of the Board of Freeholders.

I want to see us put together a panel, an environmental panel in Bergen County so we can get closer to you on some of these issues.

My own borough, the Borough of Wallington, is not mentioned in this report, and I know you have already said you are looking into the industrial latex plant in Wallington.

By the way, we know lines divide the communities, but they do not separate the pollution. They cross the lines, and in Wood-Ridge we have it, and in all of the towns that are adjacent to this, they are severely affected by the industrial latex company in Wallington.

They have been discussing that now for a couple of years, and it is important. It is in a crisis stage now.

While we were told initially by the environmental protectionists in the town that it was safe and pure, it is polluted, it is toxic, it is dangerous, it is damaging.

We have absolutely closed down wells that supply the drinking water for our population in Wallington, so it is very severe. This plant is adjacent to—adjacent to a school in Wallington where children travel those grounds, so I think it is of great significance to know there are toxic barrels out leaking, polluting the grounds and water wells in that community.

It is affecting Wood-Ridge and the surrounding towns, and you are already looking into it, and I would like to see Wallington placed on that list.

They are not on that list of concerns, because if it was concerned enough to close down a water supply that will not—first I worry about the health and then the cost. It is going to cost the town a whole lot of money, but we want to be a part of that.

I thank you for your help in that. I have nothing more to say to you, Congressman, but that the time bomb is ticking away, and we have had enough rhetoric from the office, that Environmental Protection office.

We need some more action, swifter action, and I think we will expect nothing less than that, and I think a new panel formed——

Mr. TORRICELLI. You offer a good reminder, too, for every site that is on the Superfund list that has reached national status. There are so many others recently discovered or soon to be discovered.

A single drum of raw material with a hole in it is a dangerous toxic site at the wrong time for the wrong place for the wrong material.

I think you offer the staff a reminder of that.

Thank you very much.

I think, although his town is not a guest in my district but an important part of it, nevertheless, a guest of Bergen County, would be the mayor of Kearny.

If you would like, the county would arrange for you to stay as long as you expand a little bit, mayor.

Mayor, although, of course, this material and the problem with radon is actually not in my district, it is in Mr. Guarini's half of Kearny. I tell him I have the half of Kearny without the problems. He has the half with the problems.

This problem would have been in my district but for the fact emissions weren't detected in my half of Kearny.

Thank you for coming, and we appreciate your comments.

Mr. HILL. Thank you. I certainly appreciate the opportunity of being with you. I know, although it is not your district, not your portion of Kearny, I keep tabs on meetings in Washington, and you do attend the meetings, although they do not cover your district. So, thank you for displaying interest.

Kearny is an innocent party, but being forced to accept radon from municipalities as Montclair and Glen Ridge. The presentation to the Kearny residents by DEP indicated the project to remove the radon was undertaken jointly by New Jersey Department of Environmental Protection and the Federal EPA, that DEP to complete phase 1 by November, not later than December 1985, and then EPA would take over to complete phase 2.

I followed the fulfillment of target dates very closely. Any time these people make a presentation, I insist on a target date, so if the date goes by they are at liberty to say, "What happened?"

Mr. TORRICELLI. You have exactly the right strategy.

Mr. HILL. At the time the scheduled dates were not met, I wrote letters to Senators Bradley, Lautenberg and copies to Congressman Guarini and a copy to you suggesting—seeking assistance. I was suggesting immediate action, thinking that immediate action could be obtained through the Secretaries of Energy and the EPA.

Senator Bradley replied in November and informed me he requested a meeting with the Department of Energy, Secretary Herrington.

The meeting with Secretary Herrington was held in December, including Senator Bradley, Congressman Torricelli, Guarini, and Congressman Galo.

I may have left out Lautenberg, and if Senator Lautenberg was there I apologize.

The meeting with Secretary Herrington was held in December with these people. At the conclusion of the meeting Secretary Herrington did not provide the relief that the conferees were seeking, as you well know.

Subsequent to the meeting, an amendment to the Low Level Radioactive Waste Policy Act stated that naturally occurring radioactive material would not have to be accepted until landfill designated heretofore to accept a low-level active material.

I was very much surprised to see that legislation of that type at the Federal level, which to me, being a man watching my own town, pointed a finger at me in addition to the people in Bergen County and Essex County that, yes, these landfills have been set aside for accepting this material, but now that we have had some exposure, no, they cannot send the material. In the meantime, litigation is in several courts.

George Tyler covered it, and I don't think he has covered all of it, but there is litigation in Kearny started against the State.

We backed out in a hurry on an Executive Order from the Governor, thinking we didn't want to spend any more money for a cause which I didn't think could have been accomplished.

But there are cases from Montclair suing someone and DEP suing other people going on.

And as you would expect, the residents are clamoring for action. We have 175 trailers loaded with over 8,000 55-gallon drums of radon.

Mr. Torricelli. Give me those numbers again, Mayor.

Mr. Hill. Over 8,000 55-gallon drums remain in the Kearny area.

Now, as the people have mentioned, the location of the staging area is directly across the street from Skyway Dining, which has capacity of 185—175 people, and diagonally across from Acme Food Distribution Center; and this is what bothered us.

Unfortunately, it is rather difficult to sell to the public: "This is not dangerous." As someone in Nevada stated, "Listen, if you are telling us it is not so dangerous, why don't you put the radioactive material on Atlantic City beaches and then we will get rid of it."

We certainly don't want to take that stand. But this is what we had. What appeared to me when a presentation was made—I was happy to see that the State government signed a contract with a private enterprise so that they can accept and move their radon to the landfills in Nevada or Washington, specifically Nevada, without any interference.

As long as we were forewarned—it did not. And we had this radon in front of us. Senator Laudenberg, citing his public press, he is concerned because he saw Sweden waiting 10 years before they moved in, since the beginning of an era where we will duplicate the progress or lack of progress as in Sweden. But it started so spontaneously, and I thought everyone moved so rapidly; and here we are after telling the people no radon will be in Kearny at the end of November, definitely by the end of December. We are at the end of January without any specific progress and any promise to say, yes, we will get rid of it in November.

The Supreme Court appointed a special master who I am sure is going to take—I am not a lawyer, but you are very well aware of it—it will take maybe several months before the special magistrate will be appointed. In the meantime, we have the radon in Kearny.

The Kearny area not restricted to the radon problem. I wanted to address the only radon problem hoping to get rid of this so that the landfills I have in Kearny, and with all of the other toxic waste problems I have, I will handle until such time I have to write letters again to Congressman Torricelli and the rest.

Thank you.

[The prepared statement of Mayor Hill follows:]

Mayor Hill the innocent party of being forced to accept the radon from municipalities Montclair, West Orange and Glen Ridge.

Presentation to the Kearny residents indicated that the project to remove the radon was undertaken jointly by N.J. Department of Environmental Protection and the Federal E.P.A. The DEP was to complete phase one by November, not later than December, 1985 and then E.P.A. would take over to complete phase two.

I followed the fulfilment of the target dates very closely. At the time that the scheduled dates were not met I wrote letters to Senators Bradley and Lautenberg seeking assistance, suggesting that immediate action could be attained through Secretaries of Energy and E.P.A.

Senator Bradley replied in November to inform me that he requested a meeting with Dept. of Energy Secretary Herrington.

The meeting with Secretary Herrington held in December included Senator Bradley, Congressmen Torricelli, Guarini and Galo.

At the conclusion of the meeting Secretary Herrington did not provide the relief sought by the conferees.

Subsequent to the meeting an amendment to the Low Level Radio Active Waste Policy Act stated that naturally occuring Radio Active material would not have to be accepted at the landfills designated heretofore to accept low level active material.

In the menatime litigation in several courts continues. Latest development the Supreme Court appointed a Special Master to review the case.

As you would expect the residents are clamoring for action. Since the 175 trailers loaded with over 8000-55 gallon drum of radon remain in the Kearny area. What appeared to be a straight forward movement is at a standstill.

Is this the beginning of an era where we will duplicate the progress or lack of progress as in Sweden.

TOWN OF KEARNY
HUDSON COUNTY, NEW JERSEY

HENRY J. HILL
MAYOR

October 15, 1985

Hon. Bill Bradley
P.O. Box 1720
Union, N.J. 07083

Dear Senator:

Thank you for your efforts toward solving the problem regarding the storage of radon in Kearny and in the backyards of the residential areas of adjacent communities.

I am very concerned about the continued storage of the radon in great quantities in the South Kearny area which includes a food distribution center also a diner with a capacity for 175 customers.

Since the two states, Nevada and Washington hosting the two licensed locations for accepting the radon refuse to fulfill their obligation in violation of Federal Laws, I appeal to you to demand immediate action from the Federal Department of Energy to accept the radon at locations within its jurisdiction.

In view of this traumatic experience, I feel that Senate representatives should discuss this problem with the Department of Energy and the Environmental Protection Agency to establish a long term solution to avoid in the future a Catch 22 condition experienced by the State and communities.

Thank you again for your cooperation.

Sincerely,

Henry J. Hill
Mayor

HJH:lmc

c.c. Hon. Frank Guarini
Hon. Robert Torricelli
Commissioner Robert Hughey

TOWN OF KEARNY
HUDSON COUNTY, NEW JERSEY

HENRY J. HILL
MAYOR

October 15, 1985

Hon. Frank R. Lautenberg
Gateway 1--Gateway Center
Newark, N.J. 07102

Dear Senator:

Thank you for your efforts toward solving the problem regarding the storage of radon in Kearny and in the backyards of the residential areas of adjacent communities.

I am very concerned about the continued storage of the radon in great quantities in the South Kearny area which includes a food distribution center also a diner with a capacity for 175 customers.

Since the two states, Nevada and Washington hosting the two licensed locations for accepting the radon refuse to fulfill their obligation in violation of Federal Laws, I appeal to you to demand immediate action from the Federal Department of Energy to accept the radon at locations within its jurisdiction.

In view of this traumatic experience, I feel that Senate representatives should discuss this problem with the Department of Energy and the Environmental Protection Agency to establish a long term solution to avoid in the future a Catch 22 condition experienced by the State and communities.

Thank you again for your cooperation.

Sincerely,

Henry J. Hill
Mayor

HJH:lmc

c.c. Hon. Frank Guarini
Hon. Robert Torricelli
Commissioner Robert Hughey

Mr. TORRICELLI. Thank you.

Let me say, too, it has been a delight to know your community. I am new to it, being new to the district, but the people there have been very kind and cooperative, and I have enjoyed working with the town.

I want to add, Mayor, not only do we not get a good answer from the Secretary of the Department of Energy after meeting with our delegation, we got no answer at all.

Mr. HILL. That is what surprises me.

Mr. TORRICELLI. He failed to respond. The fact is he did not have good arguments in my judgment for his refusal to accept the material. He stated the resistance of the Nevada and Washington officials, but when presented with other options by Senator Bradley, he did not present good arguments why not to accept them.

I think the reality of the situation is unless we can succeed in court, there is going to have to be a New Jersey solution, and I think the sooner the Government faces it, the better. It's going to be here, as it's going to be with Maywood. We cannot wait for State compacts, the volume of the material is too great for those compacts. In any case, it is far too distant.

We have to find a solution, and we can find a solution. This is a dangerous material, but not so dangerous that it cannot be adequately stored in New Jersey in the appropriate site, away from centers of population or commerce, without a thoughtful and imaginative concept. I think the State is beginning on that road. I think the DEP's proposal to mix the material and use it constructively is a good idea. If they will move on it, and quickly about it, and have the State accept responsibility and not just to cry over loss of other sites, we will be better off.

I hope that is where we're going for Kearny, for Maywood, and for other sites. But I think that in reality is the situation. But you can be certain that the maximum pressure is being applied in trying to have the State accept responsibility.

Mr. HILL. Can I ask a question? Did Secretary Herrington promise you an answer?

Mr. TORRICELLI. Well, he promised an answer, but, frankly, even if he didn't, I think it would be assumed when a question or proposal was posed to him by two U.S. Senators and four Congressmen, we would be entitled to an answer. But the direct answer to your question is yes. Specifically, on Senator Bradley's proposal, a site in Pennsylvania.

Mr. HILL. I will write a letter to Secretary Herrington.

Mr. TORRICELLI. In fairness to the Department, though, this has been very frustrating. This is the same Department which has handled our problems in Maywood and been extraordinarily cooperative. In fact, in the meeting the Secretary cited this as an example of how good the Department can be and how cooperative they are. And the fact is they have been. But this has been frustrating.

Mayor Gorab.

Mr. GORAB. During the period 1929 through 1974, mercury products were manufactured at a chemical plant in the Hackensack

Meadowlands area, a portion of which is located in Wood-Ridge. Mercury wastes were dumped with landfill to the rear of property which was then owned by F.W. Berk.

The borough became acutely aware of this problem in the mid-1970's and positive steps were taken to combat one of the world's largest dumps of mercury.

This matter has been in the hands of the judicial system, the Army Corps of Engineers, and State and Federal agencies since that period of time, and we have yet to see any containment of the mercury or any positive solution to this mercury problem.

We have reports by Dr. Irving Selikoff wherein he indicates that:

> * * * Mercury residues at the mercury dump site have been estimated to be about 300 tons. The mercury wastes at the dump site must be effectively entombed and mercury dispersal from the tidal marshes must be stopped.

You can well imagine during the last 20 years that the municipality has suffered, among other things, a loss of the use of this land, a loss of ratables, and a loss of jobs.

The property in Wood-Ridge covers approximately 8.9 acres and at the present time the tax assessment on this property is minimal because of the condition of the land and because at this point in time it is unusable.

Besides the environmental, ecological, and health dangers which are apparent at this site, there is also another secondary problem. This area has been characterized as one of the world's wealthiest pieces of property because of its location and accessibility to New York and its proximity to the Hackensack River Meadowlands area. Yet we are precluded as a municipality as having any vital industries at this site as well as jobs for our residents and ratables for the municipality.

After 8 to 9 years of fruitless court actions, public hearings, visits to the site by county officials, State officials and Federal officials, press releases, reports, health tests, et cetera, this property still has not had one shovel of dirt lifted or any movement made toward entombment of this mercury.

We appreciate your time and understanding and your patience. However, we would also hope that you would help us toward a positive end so that we might turn a valuable piece of property into something that can make this site into a useful one with jobs and ratables for our community.

Thank you for the opportunity to appear before you today.

[The prepared statement of Mr. Gorab follows:]

TESTIMONY BEFORE CONGRESSIONAL COMMITTEE ON TOXIC WASTE

BY

HERBERT GORAB, MAYOR

BOROUGH OF WOOD-RIDGE
BERGEN COUNTY, NEW JERSEY

During the period of 1929 through 1974 mercury products were manufactured at a chemical plant in the Hackensack Meadowlands area, a portion of which is located in Wood-Ridge. Mercury wastes were dumped with landfill to the rear of property which was then owned by F. W. Berk.

The Borough became acutely aware of this problem in the mid-1970's and positive steps were taken to combat one of the world's largest dumps of mercury.

This matter has been in the hands of the judicial system, the Army Corps of Engineers and State and Federal agencies since that period of time and we have yet to see any containment of the mercury or any positive solution to this mercury problem.

We have reports by Dr. Irving Selikoff wherein he indicates that, "... Mercury residues at the mercury dump site have been estimated to be about 300 tons. The mercury wastes at the dump site must be effectively entombed and mercury dispersal from the tidal marshes must be stopped."

You can well imagine during the last twenty years that the municipality has suffered, among other things, a loss of the use of this land, a loss of ratables, and a loss of jobs.

The property in Wood-Ridge covers approximately 8.9 acres and at the present time the tax assessment on this property is minimal because of the condition of the land and because at this point in time it is unusable.

Besides the environmental, ecological and health dangers which are apparent at this site, there is also another secondary problem. This area has been characterized as one of the world's wealthiest pieces of property because of its location and accessibility to New York and its proximity to the Hackensack River Meadowlands area, and yet we are precluded as a municipality as having any vital industries at this site as well as jobs for our residents and ratables for the municipality.

After eight to nine years of fruitless court actions, public hearings, visits to the site by County officials, State officials and Federal officials, press releases, reports, health tests, etc., this property still has not had one shovel of dirt lifted or any movement made toward entombment of this mercury.

We appreciate your time and understanding and your patience. However, we would also hope that you would help us toward a positive end so that we might turn a valuable piece of property into something that can make this site into a useful one with jobs and ratables for our community.

Mr. TORRICELLI. Thank you, Mr. Gorab. This is one site I have tried to study in detail and visit and learn about, because in many ways it is the most difficult of the official sites in our area, difficult not just because we don't know the extent of it. It's so hard to develop a strategy for dealing with it.

As you know, preliminary views of this is the belief by trying to remove it, we will exacerbate the problem and pollute a wide segment of water corridors from your community, all the way down past Mr. Hill's, into Newark Bay and New York Harbor. It is relatively dormant at the time, though some of the material is escaping. It is a current environmental problem.

The options are somewhat limited. We either have to have a massive soil removal with a site identified causal link, or we have to build a series of dikes and isolate the water in that region. I think that our best strategy, yours and mine, for our responsibilities, is to press this summer, may begin at least studying the engineering, technical data on the alternatives so we can look at what the choices might really be.

Because at the moment, I don't think there is enough known to even reach those judgments. Frankly, I think one would have to conclude, however, that this is the most perplexing and probably will be the last of the great environmental problems in Bergen County to get solved because of its extent. Nevertheless, I think at a minimum, we have to press that this summer we'll present them with the options, and they at least begin to study the engineering required for each of these various alternatives. It is that important, and that, again, is one of the reasons why we're here, to put the time deadlines down, as Mr. Hill said, so we know what is committed, and we can ask, come August, where is it?

Mr. GORAB. Thank you very, very much.

Mr. TORRICELLI. Thank you.

Mr. PANOS. Good afternoon.

During the last 2 years, much has happened in the borough of Maywood in regard to its thorium contamination. Three years ago, I sat before the members of this committee and was encouraged by the news of the agreement between the DOE and the Stepan Co. that would allow the cleanup of Maywood to begin. Since that time, I've learned that not only does every cloud have a silver lining, but every ray of sunshine may also be contaminated.

Initially, everyone was optimistic about the project, and, in all honesty, Maywood has benefited tremendously. Action during the past 2 years has made our homes thorium-free. All now know, the word "initially" is always an omen of problems to come. And there have been some problems during the course of this project—some real, some imagined, and some could have been completely avoided through greater communication.

One such problem caused by a lack of communication concerned the transfer of contaminated soil from Lodi to the Maywood interim storage site. All of the plans for this project were completed before the officials of Maywood were informed when an article appeared in a daily newspaper which declared that Maywood's interim storage site would now be used to store waste from Lodi. The impact of this article on the people of Maywood was devastating. A feeling of mistrust and betrayal pervaded our town and no longer would our residents listen to reason, to facts or to any information presented.

A lack of communication created another problem regarding the transfer of ownership of the interim storage site from the Stepan Co. to the DOE. We were assured that this transfer would comply with all local ordinances. Even this rather simple procedure was misunderstood. Maywood was obligated to institute a lawsuit, which is still pending, to stop the transfer. It's sometimes difficult dealing with an agency that can postulate, "We are the Federal Government."

The greatest fear shared by all the people of Maywood is the uncertain status and/or duration of the interim storage site. We are told that it will only exist until a permanent site is established. Thus, it becomes apparent that our biggest problem is that no one can tell us when that will be. The DOE has consistently maintained that the State of New Jersey has the responsibility for the selection of a site, while the State maintains that this is a Federal project and the responsibility rests with the DOE. At this time, I do not believe that the DOE has actually searched for a permanent site, nor has the State, which is currently requesting a 5-year extension in naming a toxic waste site.

There are similar radioactive problems in the towns of Montclair and Glen Ridge that are currently being managed by the New Jersey DEP. Within the past year, an attempt was made to ship 8,000 barrels of this contamination to Nevada and additional sites in Washington State and McGuire Air Force Base, and Picatinny area being considered as disposal sites. I've never heard of anyone suggesting a final disposal site for Maywood's contamination. It appears as if the responsibility for locating a permanent site has become a political football. The Super Bowl is over, and we are tired of watching the ball being passed back and forth.

Another possibility that warrants further investigation is that of ocean dumping. A report funded by the U.S. Department of Energy, prepared by Sandia National Laboratories, concluded that nothing has been found that would preclude safe and inexpensive disposal of this material in the ocean. Now that the EPA moratorium on ocean dumping has elapsed, that is a viable solution to our problem and should be considered strongly. This would enable the immediate removal of contaminated soil from Maywood and ensure that the interim site will never become a permanent site.

Often the lack of a solution is part of the problem. Keeping this in mind, I would like to offer the following:

Initially, the DOE should agree to accept a fixed lease of the Stepan Co. property rather than insist that the land be conveyed outright. This would not only solve the subdivision dilemma but also allay the fears that this site will be designated as a permanent disposal site for low-level radioactive waste.

Second, the DOE, Federal EPA, the New Jersey DEP and the Governor's Office should work together to find a suitable permanent disposal site. Such a site should not only be located far from population centers, such as Maywood, but should also provide suitable environmental protections. The aforementioned studies on ocean dumping should be seriously considered and if found suitable, should be implemented at the very earliest date.

Third, the cleanup of the remaining Maywood properties should be completed as expeditiously as possible. It should be further understood and stressed again that Maywood's interim storage site should not be used to store any contamination other than that already identified in the borough of Maywood.

Finally, funding should be provided now to complete not only the cleanup but the removal of all contaminated material located in the interim storage site to a suitable permanent location. Without the foregoing, doubts will continue to persist and our residents will continue to face the fear of living in close proximity to a source of contamination. We were assured at the outset of this project that we would not have to face this fear. We only ask now that such assurances be honored.

Thank you.

[The prepared statement of Mayor Panos follows:]

Office of the Mayor
James J. Panos

TESTIMONY OF MAYOR JAMES J. PANOS, BOROUGH OF MAYWOOD, COUNTY OF BERGEN, STATE OF NEW JERSEY, ON JANUARY 27, 1986, BEFORE THE HOUSE SUBCOMMITTEE ON NATURAL RESOURCES, AGRICULTURE RESEARCH AND ENVIRONMENT AT HACKENSACK, NEW JERSEY

459 Maywood Avenue • Maywood, New Jersey 07607

DURING THE LAST TWO YEARS, MUCH HAS HAPPENED IN THE BOROUGH OF MAYWOOD IN REGARD TO ITS THORIUM CONTAMINATION. THREE YEARS AGO, I SAT BEFORE THE MEMBERS OF THIS COMMITTEE, AND WAS ENCOURAGED BY THE NEWS OF THE AGREEMENT BETWEEN THE D.O.E. AND THE STEPAN COMPANY THAT WOULD ALLOW THE CLEAN UP OF MAYWOOD TO BEGIN. DURING THE TIME THAT HAS ELAPSED, I'VE LEARNED THAT NOT ONLY DOES EVERY CLOUD HAVE A SILVER LINING, BUT EVERY RAY OF SUNSHINE MAY ALSO BE CONTAMINATED.

INITIALLY, EVERYONE WAS OPTIMISTIC ABOUT THE PROJECT AND, IN ALL HONESTY, MAYWOOD HAS BENEFITTED TREMENDOUSLY. ACTION DURING THE PAST TWO YEARS HAS MADE OUR HOMES THORIUM-FREE, AND HAS ESTABLISHED AN INTERIM STORAGE SITE WHICH IS CURRENTLY BEING MONITORED ACCORDING TO ALL FEDERAL AND STATE GUIDELINES. AS WE ALL NOW KNOW, THE WORD "INITIALLY" IS ALWAYS AN OMEN OF PROBLEMS TO COME. WE HAVE BEEN PLAGUED WITH PROBLEMS DURING THE COURSE OF THIS PROJECT--SOME REAL, SOME IMAGINED, SOME CAUSED BY POLITICAL GAMESMANSHIP AND SOME WHICH COULD HAVE BEEN COMPLETELY AVOIDED THROUGH GREATER COMMUNICATION.

ONE SUCH PROBLEM CAUSED BY A LACK OF COMMUNICATION CONCERNED THE TRANSFER OF CONTAMINATED SOIL FROM LODI TO THE MAYWOOD INTERIM STORAGE SITE. RATHER THAN BEING INFORMED BY THE AGENCIES INVOLVED, MAYWOOD'S OFFICIALS BECAME AWARE OF THE SOLUTION TO LODI'S PROBLEM WHEN AN ARTICLE APPEARED IN A DAILY NEWSPAPER WHICH DECLARED THAT MAYWOOD'S INTERIM STORAGE SITE WOULD NOW BE USED TO STORE WASTE FROM LODI. THE IMPACT OF THIS ARTICLE ON THE PEOPLE OF MAYWOOD WAS DEVASTATING. A FEELING OF MISTRUST AND BETRAYAL PERVADED OUR TOWN AND NO LONGER WOULD OUR RESIDENTS LISTEN TO REASON, TO FACTS OR TO ANY INFORMATION ANY OFFICIAL PRESENTED. IN AN EFFORT TO RE-ESTABLISH SOME CREDIBILITY, THE TOWN OF MAYWOOD HIRED AN INDEPENDENT HEALTH

PHYSICIST TO PREPARE A STUDY ON THE EFFECTS THE INTERIM STORAGE SITE MAY HAVE ON THE HOMES WHICH SURROUND IT.

A LACK OF COMMUNICATION CREATED ANOTHER PROBLEM REGARDING THE TRANSFER OF OWNERSHIP OF THE INTERIM STORAGE SITE FROM THE STEPAN COMPANY TO THE D.O.E. DURING VARIOUS MEETINGS BETWEEN TOWN OFFICIALS AND THE D.O.E., WE WERE ASSURED THAT THIS TRANSFER WOULD COMPLY WITH ALL LOCAL ORDINANCES. EVEN THIS RATHER SIMPLE PROCEDURE WAS MISUNDERSTOOD, WHICH BECAME EVIDENT WHEN THE TITLE TRANSFER WAS RECORDED BEFORE THE SUB-DIVISION WAS PRESENTED TO MAYWOOD'S PLANNING BOARD. MAYWOOD WAS OBLIGATED TO INSTITUTE A LAWSUIT, WHICH IS STILL PENDING, TO STOP THE TRANSFER. IT'S SOMETIMES DIFFICULT DEALING WITH AN AGENCY THAT CAN POSTULATE, "WE ARE THE FEDERAL GOVERNMENT."

THE GREATEST FEAR SHARED BY ALL THE PEOPLE OF MAYWOOD IS THE UNCERTAIN STATUS AND/OR DURATION OF THE INTERIM STORAGE SITE. WE ARE TOLD THAT IT WILL ONLY EXIST UNTIL A PERMANENT SITE IS ESTABLISHED. THUS, IT BECOMES APPARENT THAT OUR BIGGEST PROBLEM IS THAT NO ONE CAN TELL US WHEN THAT WILL BE. THE D.O.E. HAS CONSISTENTLY MAINTAINED THAT THE STATE OF NEW JERSEY HAS THE RESPONSIBILITY FOR THE SELECTION OF A SITE, WHILE THE STATE MAINTAINS THAT THIS IS A FEDERAL PROJECT AND THE RESPONSIBILITY RESTS WITH THE D.O.E. AT THIS TIME, I DO NOT BELIEVE THAT THE D.O.E. HAS ACTUALLY SEARCHED FOR A PERMANENT SITE, NOR HAS THE STATE, WHICH IS CURRENTLY REQUESTING A FIVE-YEAR EXTENSION IN NAMING A TOXIC WASTE SITE.

THERE ARE SIMILAR RADIOACTIVE PROBLEMS IN THE TOWNS OF MONTCLAIR AND GLEN RIDGE THAT ARE CURRENTLY BEING MANAGED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION. UNLIKE THE MAYWOOD SITE, MUCH ATTENTION HAS BEEN GIVEN TO A FINAL DISPOSAL SITE FOR THAT MATERIAL. WITHIN THE PAST YEAR, 8000 BARRELS OF

THIS CONTAMINATION WAS SHIPPED TO NEVADA AND ALTHOUGH IT WAS REFUSED BY THAT STATE AND IS NOW BEING STORED IN A RAILYARD IN KEARNY, THE SEARCH CONTINUES. SENATOR LAUTENBERG HAS BEEN QUOTED AS SAYING THAT HE WOULD EXPLORE THE POSSIBILITY OF STORING THE MATERIAL AT MC GUIRE AIR FORCE BASE. JUST YESTERDAY AN ARTICLE APPEARED IN THE RECORD STATING THAT THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION HAS ASKED THE FEDERAL E.P.A. TO CONSIDER THE PICATINNY ARSENAL AS A SITE WHERE THE CONTAMINATED DIRT WOULD BE BLENDED WITH UNTAINTED EARTH AND RENDERED HARMLESS. JAMES STAPLES, A SPOKESMAN FOR THE D.E.P., WAS QUOTED AS SAYING "PICATINNY ARSENAL LOOKS GOOD TO US BECAUSE IT HAS LOTS OF SPACE AND IT'S ON TOP OF THE READING PRONG." I'VE NEVER HEARD ANYONE SUGGEST A FINAL DISPOSAL SITE FOR THE CONTAMINATED SOIL IN MAYWOOD. IT APPEARS AS IF THE RESPONSIBILITY FOR LOCATING A PERMANENT SITE HAS BECOME A POLITICAL FOOTBALL. THE SUPER BOWL IS OVER AND WE ARE TIRED OF WATCHING THE BALL BEING PASSED BACK AND FORTH.

ANOTHER POSSIBLITY THAT WARRANTS FURTHER INVESTIGATION IS THAT OF OCEAN DUMPING. SINCE THORIUM IS DERIVED FROM MONZONITE SAND WHICH IS NATURALLY OCCURRING ON THE OCEAN FLOOR, THE NORMAL BACKGROUND READING OF THE OCEAN FLOOR WOULD NOT BE AFFECTED. IN A REPORT FUNDED BY THE U.S. DEPARTMENT OF ENERGY, PREPARED BY SANDIA NATIONAL LABORATORIES, THE FEASIBILITY OF OCEAN DUMPING OF THE CONTAMINATED DIRT OF MIDDLESEX, NEW JERSEY WAS EXPLORED. THE RADIOACTIVITY OF THAT DIRT IS SIMILAR TO THAT OF MAYWOOD, AND THE RESULTS OF THAT REPORT COULD BE APPLIED TO MAYWOOD. TWO POTENTIAL SITES WERE IDENTIFIED IN THE REPORT WHICH CONCLUDED THAT, AND I QUOTE, "TO DATE WE HAVE FOUND NOTHING THAT WOULD PRECLUDE SAFE AND INEXPENSIVE DISPOSAL OF THIS MATERIAL IN THE OCEAN." NOW THAT THE E.P.A. MORATORIUM ON OCEAN DUMPING HAS

ELAPSED, I BELIEVE THAT THIS IS A VIABLE SOLUTION TO OUR PROBLEM AND SHOULD BE CONSIDERED STRONGLY. THIS WOULD ENABLE THE IMMEDIATE REMOVAL OF CONTAMINATED SOIL FROM MAYWOOD AND INSURE THAT THE INTERIM SITE WILL NEVER BECOME A PERMANENT SITE.

OFTEN THE LACK OF A SOLUTION IS PART OF THE PROBLEM. KEEPING THAT IN MIND, I WOULD LIKE TO OFFER THE FOLLOWING:

INITIALLY, THE D.O.E. SHOULD AGREE TO ACCEPT A FIXED LEASE OF THE STEPAN COMPANY PROPERTY RATHER THAN INSIST THAT THE LAND BE CONVEYED OUTRIGHT. THIS WOULD NOT ONLY SOLVE THE SUBDIVISION DILEMMA, BUT ALSO ALLAY THE FEARS THAT THIS SITE WILL BE DESIGNATED AS A PERMANENT DISPOSAL SITE FOR LOW LEVEL RADIOACTIVE WASTE.

SECONDLY, THE D.O.E., FEDERAL E.P.A., THE NEW JERSEY D.E.P. AND THE GOVERNOR'S OFFICE SHOULD WORK TOGETHER TO FIND A SUITABLE PERMANENT DISPOSAL SITE. SUCH A SITE SHOULD NOT ONLY BE LOCATED FAR FROM POPULATION CENTERS SUCH AS MAYWOOD, BUT SHOULD ALSO PROVIDE SUITABLE ENVIRONMENTAL PROTECTIONS. THE AFOREMENTIONED STUDIES ON OCEAN DUMPING SHOULD BE SERIOUSLY CONSIDERED AND IF FOUND SUITABLE, SHOULD BE IMPLEMENTED AT THE VERY EARLIEST POSSIBLE DATE.

THIRDLY, THE CLEAN UP OF THE REMAINING MAYWOOD PROPERTIES SHOULD BE COMPLETED AS EXPEDITIOUSLY AS POSSIBLE. IT SHOULD BE FURTHER UNDERSTOOD AND STRESSED AGAIN THAT MAYWOOD'S INTERIM STORAGE SITE SHOULD NOT BE USED TO STORE ANY CONTAMINATION OTHER THAN THAT ALREADY IDENTIFIED IN THE BOROUGH OF MAYWOOD.

FINALLY, FUNDING SHOULD BE PROVIDED NOW TO COMPLETE NOT ONLY THE CLEAN UP, BUT THE REMOVAL OF ALL CONTAMINED MATERIAL LOCATED IN THE INTERIM STORAGE SITE TO A SUITABLE PERMANENT LOCATION. WITHOUT THE FOREGOING, DOUBTS WILL CONTINUE TO PERSIST AND OUR RESIDENTS WILL CONTINUE TO FACE THE FEAR OF LIVING IN

CLOSE PROXIMITY TO A SOURCE OF CONTAMINATION. WE WERE ASSURED AT THE OUTSET OF THIS PROJECT THAT WE WOULD NOT HAVE TO FACE THIS FEAR. WE ASK ONLY THAT SUCH ASSURANCES BE HONORED. THANK YOU.

Mr. TORRICELLI. Thank you.

Let me say the people of Maywood may not have come to know it yet, but we would not be nearly as far along in the solution had it not been for the leadership of this mayor. Maywood is a success story to date. The immediate health dangers of the people of Maywood are over. Now, there is the long-term concern that we not create a new problem, a new health danger in the future. That is all of our commitment.

There are a number of strategies. First I think from this hearing today, we understand that there is every reason to believe it can be tried and made as part of a State program for the Kearny, Essex County radon, to have its removal an option we can certainly explore.

We talked about the sea dumping options, which is a difficult legislative procedure, but still a possibility to look at as well.

And, finally, to press the state again to meet its responsibility to provide a disposal site rather than wishing for that which will never be obtained, which is an immediate Federal site or an immediate compact site in Ridgewood. The fact is that it's not responsible for the state to merely wait for the decade to pass before meeting its obligation to provide for a site, and at the moment that is the state's strategies, because the State is waiting for a compact site in Ridgewood. So I think we have a number of options.

We also have an obligation to have some judgment reached this year so that people have an understanding of the long-term consequences. I think people in town by and large have been responsible. Knowledgeable people in the community understand that the immediate health danger was long-term close proxmity to the thorium material. Cooperation of the Department of Energy and the leadership of people in the community, that danger is over. That does not mean we are not sensitive to the continued danger of permament storage in town. That cannot and will not be permitted.

The department will soon release its study of the permanent disposal option. But, remember, it is no option at all. Regardless of the outcome of the study, we have made clear, as a matter of Federal law, Maywood cannot become a permanent disposal site, nor as long as I serve as representative of the community will that be permitted. We have found no legislative opposition in the Congress to prohibition, there is none, I cannot believe there ever will be any. It will not be allowed, and that is now a matter of record and of law in the Congress.

But I think those are our strategies. We have a number available, and I remain optimistic on the long-term solution. Maywood will remain a success story.

Mr. PANOS. Just one thing, perhaps. There are still some areas in our commercial sites, I believe, that have some type of danger to the people in the communities, test sites, where it is unmonitored, it's not fenced in, children are playing on and so on. I think some additional cleanup has to be done accordingly.

Mr. TORRICELLI. Which sites are you referring to?

Mr. PANOS. Jack's car wash——

Mr. TORRICELLI. We are in the dilemma of wanting a quick resolution to the commercial properties, and we are also wanting to see that material transferred to a permanent site. We both want quicker action, and we want it sufficiently delayed to avoid more temporary storage facilities. It is a difficult position that can only be resolved by an immediate State permanent disposal.

Mr. Potter, we always down here defer to people who are our seniors first to testify.

Mr. **Hersh**. I can remember when I was his age, too.

Congressman Torricelli, thank you very much for inviting me here today. It is a pleasure to be here with such distinguished company.

I would like to tell you a little about the Fair Lawn story, which you are very familiar with, but I think we should repeat it for everyone's knowledge. Fair Lawn had been considered high priority by the Superfund Agency in 1983, due to the high amounts of contaminants found present in some of our groundwater sources, that is, wells for drinking water. All of our wells had and have some presence of contaminants to this date. We have been affected since 1978 and closed four wells in 1979, which are still closed. These wells had far exceeded the acceptable standards for water.

These were discovered incidentally by an industrial property owner-neighbor, and we were able to, after retaining consultants, localize the worst contamination to our industrial park. We, not knowing exactly in which direction to proceed, retained consultants to advise us how to trace the source of contaminants and, most importantly, how to deal with it, which again led us to the industrial park, and we are talking about chemical contaminants, benzene products and things of that sort, chloroform.

After the report of the—receipt, rather—of the consultant's report, we then decided to proceed and have plans and specifics made for purification of this well water. Therefore, we in Fair Lawn were pioneering to some extent.

During this entire time, of course, there were headlines and newspaper articles from time to time causing concern on the part of the people over the suitability of the water for drinking purposes. I would say, after speaking to many people in Fair Lawn, that there is great concern over the water still today. I receive occasionally calls from mothers who are concerned about giving this water to their children, to their babies.

Recently we found the introduction of a new contaminant in another well field, a contaminant called MTBE, which has no standards determined for it, and slightly elevated levels of known contaminants at one of our testing sites. We immediately closed the new offending wells, and this was somewhat precipitated, too, by letter from the DEP which told us that one of these sites required exceeded the present standards, but that was rescinded, and we have a year to accomplish the purification of the water.

As I said, we immediately closed the new offending wells and have obligated ourselves to constructing a purification plant there, to hedge against any increase in contamination in that area and to restore public confidence, which was again eroded by newspaper headlines. The water presently is within allowable limits for potability by New Jersey DEP.

However, the previous notoriety had created a minor hysteria. I sent out a letter as Mayor to all taxpayers and water users in Fair Lawn in November 1985 assuring them the water we distribute is well within safe limits required, at least presently, with the hope that this would reduce the concern of water users. And, by the way, in Fair Lawn, we obtain about 40 percent of our water from our wells and the balance from Hackensack water and from Safe Valley during the winter time.

The continued publicity of toxic sites in general makes public confidence difficult to achieve. Of course, to cure the problems becomes difficult because of the high cost involved. I might suggest that your body can be very helpful by lending the weight of the power of your office and resolving problems such as we encounter by wading through bureaucracy to gain fast action when needed, both in identifying problems and of aiding and funding the remedies.

As I pointed out, we in Fair Lawn are embarking on a second water purification program because we became familiar the hard way, at our own costs. Your assistance in financial relief for such vital projects is sorely needed, particularly at this time, when the Federal revenue sharing and State revenues are drastically cut back or nonexistent.

[The prepared statement of Mayor Hersh follows:]

STATEMENT FOR CONGRESSIONAL HEARING OF JANUARY 27, 1986.

BOROUGH OF FAIR LAWN, NEW JERSEY - BY BERNARD HERSH, COUNCILMAN.

SUBJECT: TOXIC WASTES.

Honorable Chairman and Members of the Committee:

Fair Lawn had been considered high priority by the Superfund Agency in 1983 due to the high amounts of contaminents found present in some of our ground water sources (wells) for drinking water; all of our wells had and have some presence of contaminents to this date.

We have been affected since 1978, which was discovered after being notified by an industrial property owner of difficulties he encountered, and we were able to, after retaining consultants, localize the worst contamination to our Industrial Park.

In those days people were not as cognizant of the problems of toxic wastes infused into the ground by industry. However, we closed 4 wells (showing the worst levels of contamination) after having tests made. Our immediate reaction was to shut down all active wells (17 in all) in order to familiarize ourselves with the requirements of the NJDEP for safe potable water, and, about March 1, 1979 shut down only the 4 wells and returned the balance to service. Those 4 wells are in the Westmoreland Field (the Industrial Park Area); the levels of contamination were extremely high - and far above the 100 pbb considered as potable.

We, not knowing exactly in which direction to proceed, retained consultants to advise us how to trace the source of contaminants, and, most importantly, how to deal with it, which again led us to the Industrial Park.

Meanwhile, NJDEP was investigating for possible sources. The 4 closed wells remain so at this date, with the water from them being pumped to waste.

After receipt of the first consutlant's report, the Borough Council hired another consultant in 1982 to prepare plans and specifications for the construction of treatment facilities at Westmoreland for purifying and returning to use the wasted water, which facilities were projected to cost $200,000 in 1983; our actual cost will be $490,000, not to mention our costs for wasted well water and pumping.

All of this was occurring at a time when the concept of acknowledging ground contamination by toxic chemicals was new to the general public, and, of course, to the members of our governing body. Therefore, we, in Fair Lawn, were pioneering to some extent. We were fortunate, too, that the wells provided only perhaps 40% of the total required supply needed, except in the summer, to turn to our other suppliers for all of our needs would have raised our costs considerably, thus making our well system imperative.

The remedial work for purification costs were high and we needed assistance in that regard, particularly from the EPA or NJDEP, or the culpable parties. How to do this? We found that Congressman Robert G. Torricelli was very much aware and concerned with this problem generally, and, realizing that we were one of the most hard hit, lent us a hand. Congressman Torricelli led us to the Superfund, and then influenced the NJDEP to concentrate on resolving our problem. I am happy to state that the end result at this point has been that NJDEP has found the two industries who caused the problem, and we have been paid the sum of $1,200,000 total for the establishment of a new water master plan and the construction of a purification system for that well field, which is being implemented. This entire process took from 1978 to 1984.

During this entire time, of course, there were headlines and newspaper articles from time to time, causing concern on the part of the people over the suitability of the water for drinking purposes. I would say, after speaking to many people here in Fair Lawn, that there is great concern over our water. I have received calls from mothers of small children, when their water was discolored due to flushing the system, for example, expressing great concern over its purity. Many people tell me that they drink only bottled water.

Recently we found the introduction of a new contaminant in another well field (MTBE), and slightly elevated levels of known contaminants at one of our testing sites. We immediately closed the new offending wells, and have obligated ourselves to construct a purification plant there, to hedge against any increase in contamination in that area, and to restore public confidence which was again eroded by newspaper headlines. The water presently is within allowable limits for potability by NJDEP, however, the previous notoriety had created a minor hysteria.

I sent out a letter, as Mayor, to all taxpayers in Fair Lawn in November, 1985 assuring them that the water we distribute is well within safe limits required, with the hope that this would reduce the concern of water users.

The continued publicity of toxic sites, in general, makes public confidence difficult to achieve. Of course, to cure the problems becomes difficult because of the high costs involved.

I might suggest that your body can be very helpful by lending the weight of the power of your office in resolving problems, such as we encountered, by wading through bureaucracy to gain fast action when needed, both in identifying problems and aiding in funding the remedies. As I pointed out, we in Fair Lawn are embarking on a second water purification program (because we became familiar the hard way) at our own cost. Your assistance in financial relief for such vital projects is sorely needed, particularly at this time when Federal Revenue Sharing and State Revenues are drastically cut back or non-existent.

Of course, it is essential that public confidence be restored in government and bureaucracy through, possibly, publicizing more of the causes and cures in a convincing manner at the grass roots level. The people must know also we are all doing something positive, and they must believe in us when we assure them after positive results have been achieved.

Mr. HERSH. I might say, too, Congressman, that you came into the picture with us in 1983, introduced us to the concept of the Superfund and to the New Jersey DEP and to the grant programs and all the other stuff, and as it turned out, Superfund kind of disappeared, but with your help we did obtain assistance from the DEP and as you know, we have recently—as we stated here earlier—made an agreement with two of the industries—two of the offending industries in Fair Lawn for the sum of $1.2 million for the improvement and purification of our water. In other words, improvement of our water system with regard to wells and that.

Of course, it is essential public confidence be restored to Government and bureaucracy through possibly publicizing more of the causes and cures in a convincing manner at the grass roots level.

The people must know also that we are all doing something positive and they must believe in us when we assure them after positive results have been achieved. I might just say one other thing, that it took us for the—from the time of discovery of contamination before particularly the four offending wells that are still closed, from 1978 to 1984, to resolve the problem, and we are about to construct a purification plant. That's a long time to resolve problems. We must speed up this process. Thank you.

Mr. TORRICELLI. Do we know yet whether the new well problem has any relation to the other problems?

Mr. HERSH. At first we thought there was a possibility of migration of contaminants from the industrial park over to that area. We have been reasonably assured it's too early for that to have happened. So these contaminants somehow or other are finding their way from other sources and while at the present time the normal, let's say, contaminants that are familiar to us, are still within reasonable portions, well below a hundred parts per billion in, let's say, volume, the new chemical, MBTE, was something that nobody could tell us about, and that was one of the reasons that we had the impetus to close the wells.

We don't know what it is, but we don't want to use it and so we closed the wells.

Mr. TORRICELLI. Is the new well also an industrial site?

Mr. HERSH. No; the new well is on the west end of town, which is where we expected the migration to take place from. The industrial park is roughly in the central part of Fair Lawn, and because of the rock strata and trace fractures, to use a technical term, in the rock——

Mr. TORRICELLI. I see you have been reading a lot.

Mr. HERSH. Yes, I've become familiar with it.

The migration of contaminants would head in the direction of the west, which is toward the Cadmus Well Field and Memorial Field, which sends its water into Cadmus and from there it's distributed. So we closed the three wells at Memorial Field, the Cadmus Field were closed for repairs and rehab. And at the present time they are closed, all of them, except one well which shows no evidence whatsoever of contamination.

Mr. TORRICELLI. I've been told that under the proposals made by Fisher and Sandia that the community would bear no costs for either the purchase of water now or for the solving of the problem in the future. I don't know whether those documents have been made available to your community.

Mr. **Hersh**. I'm not familiar with them.

Mr. **Torricelli**. I have not seen them either but I have been told from various officials the companies have lived up to their responsibilities and will reimburse the community and meet all of its costs in the future, so the people of Fair Lawn financially and in solving their problem appear to be protected, so our bringing DEP to the site initially has proved to be a success. We merely now have to meet the new problem.

Mr. **Hersh**. I might take this opportunity also to commend the DEP. Our consultants indicated that we could generally localize the source of contamination, but did not give us much hope for specifically pointing a finger at anybody, and the DEP came in and they did.

Mr. **Torricelli**. And they did so very quickly. I was very pleased with DEP in Fair Lawn. They did an excellent job and frankly faster than I thought would be possible.

What is the status of the other problem at Fair Lawn, the company that put all that mud out? Bernie and I were down 1 day and some people's basements——

Mr. **Hersh**. Oh, Sandos.

Mr. **Torricelli**. Is that problem resolved?

Mr. **Hersh**. Not really resolved. We are awaiting test results. We are trying to determine whether these chemicals that were found in the sewers, in a very hard, caked form are contaminants. In the meantime—and we haven't gotten those results. In the meantime, we've cleaned out some sewers. We are putting in a new sewer system and that new sewer system is bypassing the homes that were affected by the backup from Sandos. Again, that made all the headlines.

Mr. **Torricelli**. This is a problem other mayors should be well aware of because you may face it 1 day. This is a case where the Sandos Corp. was exiting waste water with some thick material in it, it backed up the town's clean exit water systems, sewer system. There was no protection between the industrial exit and the homes, it backed up into all of the houses and flooded the houses. Out of people's sinks came a fountain of this material, because the systems were not properly separated, industrial home systems, and the capacity was not sufficient.

With continued use of companies dumping all this material into municipal sewer systems local sewer systems, that will happen more and more and it's something you should be familiar with as you engineer the sewer systems or replace them.

Mr. **Hersh**. We have not resolved that problem. In the meantime, some of the people who are affected—whose homes are affected, have started a lawsuit and we are in litigation with them——

Mr. **Torricelli**. Against the company?

Mr. **Hersh**. Yes; so I'm not going to say too much about it.

Mr. **Torricelli**. I understand. Mr. Potter, counselor.

Mr. **Potter**. Thank you very much, Congressman Torricelli, for giving me this opportunity to represent my borough. This is indeed an important forum. I discovered some new information this morning when I heard the Government representatives indicate a report would be due as to seepage through the ground in February and March and we'll be very anxious to see that. The site in East Rutherford is the UOP Chemical site which contains hundreds of thousands of gallons of bottled organic solvents.

I've submitted a statement so I won't bother reading it, but I would like to emphasize that because of the condition of the site, it is not currently usable. In preparing the statement I spoke to our treasurer-tax collector and we currently generate about $110,000 of tax revenues from the land.

This land, because it is in one of the most valuable parts of the county, could generate as much as $700,000 per year taxes to our bureau, if it were utilized as it should be. If it were fully productive.

Now, of course, East Rutherford, being one of the few UDAG eligible towns in Bergen County, tax stabilization and jobs are very important, so we want to see this expedited—the cleanup expedited—and I think you summed it up very well this morning when you said perturbed in 1986 because it has been quite a few years and we would like to see some movement. There is a quantifiable amount of money here that our taxpayers are losing because of the state of this property, not to mention the quality of life aspects, which are represented in my statement.

In all fairness, I would like to say that the UOP has been fairly cooperative. Our attorney's offices indicated they have been working on it and generated a few extensive reports, but we would like to see some movement in the cleanup.

I'm also sure that UOP has some interests that are similar to us. I'm sure the land is much more valuable to them too. So I do appreciate what you have done and you did bring this to our attention right when you were elected and sworn into office at the same time I was. So, thank you for working on it. Keep the pressure on.

[The prepared statement of Councilman Potter follows:]

STATEMENT OF COUNCILMAN RICHARD POTTER EAST RUTHERFORD, NEW JERSEY

TOXIC WASTE HEARING
JANUARY 27, 1985

Situated within the Borough of East Rutherford is the site of a former U.O.P. plant, where supposedly is buried many thousands of barrels of organic solvents. This poses two main problems with particular impact for the citizens of of East Rutherford, aside from the more general problem of hazardous chemicals introduced into the environment.

First, because of its location, the site of these chemicals is hindering use of land adjacent to Becton Regional High School. Becton Regional High School, serving East Rutherford and Carlstadt, is located about 100 to 200 yards from U.O.P. property. According to Mr. Mark Ramsay of the Becton Board of Education, land is needed to develop a practice field for sports programs at the High School. There is a vacant lot adjacent to the High School owned by Becton, Dickinson Company, which would be ideally suited for this use and which the Board of Education would like to acquire from Becton, Dickinson. However, the Board is reluctant to make any moves toward such an acquisition and development because of the proximity of the U.O.P. site. The Board fears chemicals from the site may have leached into the soil and migrated to the property in question.

The second problem regards use of the land itself. In its current condition, the land cannot be developed. This contaminated land is situated in an area of some of the most valuable property in the County. U.O.P. cannot develop the property or sell it to some organization that will develop it. East Rutherford loses the benefit of increased revenues which could be realized if the land were productively used. Also jobs for local residents could be generated. As a U.D.A.G. eligivle Borough, we are interested in maintaining low taxes and encouraging industry.

East Rutherford lacks the resources skill necessary to gauge the parameters of the waste site and clean it up. The best we can hope for is that U.O.P. or the State or Federal Government intervenes and take steps to restore the property to its proper value.

Situated within the Borough of East Rutherford is the site of a former U.O.P. plant, where supposedly is buried many thousands of barrels of organic solvents. This poses two main problems with particular impact for the citizens of of East Rutherford, aside from the more general problem of hazardous chemicals introduced into the environment.

First, because of its location, the site of these chemicals is hindering use of land adjacent to Becton Regional High School. Becton Regional High School, serving East Rutherford and Carlstadt, is located about 100 to 200 yards from U.O.P. property. According to Mr. Mark Ramsay of the Becton Board of Education, land is needed to develop a practice field for sports programs at the High School. There is a vacant lot adjacent to the High School owned by Becton, Dickinson Company, which would be ideally suited for this use and which the Board of Education would like to acquire from Becton, Dickinson. However, the Board is reluctant to make any moves toward such an acquisition and development because of the proximity of the U.O.P. site. The Board fears chemicals from the site may have leached into the soil and migrated to the property in question.

The second problem regards use of the land itself. In its current condition, the land cannot be developed. This contaminated land is situated in an area of some of the most valuable property in the County. U.O.P. cannot develop the property or sell it to some organization that will develop it. East Rutherford loses the benefit of increased revenues which could be realized if the land were productively used. Also jobs for local residents could be generated. As a U.D.A.G. eligivle Borough, we are interested in maintaining low taxes and encouraging industry.

East Rutherford lacks the resources skill necessary to gauge the parameters of the waste site and clean it up. The best we can hope for is that U.O.P. or the State or Federal Government intervenes and take steps to restore the property to its proper value.

Mr. TORRICELLI. Thank you, Mr. Potter. Actually our last witness today is going to be a representative of UOP, the corporation. And I should say, too, I think this whole experience teaches us several things, first there are companies that come forward and meet their responsibility.

It would appear Universal Oil Products may be one of them, Stepan Chemical is certainly one of them that came forward. Murray Fiber, the site in Woodbridge, submitted a statement today which I will share with you, Mayor.

The Woodbridge site may be one of those companies as well. We returned for all those who do not cooperate, some also do. And because of the final point you made, you can look at the environmental problem in many ways. It is an impediment to good health, it impairs the quality of life in communities, and it also costs money.

Some of the real estate contaminated in Bergen County is among the most valuable in the world. That not only is not earning tax revenue for your community, factories are not there providing jobs, it is not being developed to the benefit of its owners.

So we see progress, environmental protection, for a number of reasons because people genuinely care about our citizens, because they want to do the right thing and because they also—because environmental protection and the cleaning of these toxic sites is increasingly good business.

Thank you each and every one of you. To the extent that the companies involved in your locations have submitted things for the record, statements, I'll provide them to you. When they have not, we will watch the dates that have been announced here today carefully, the statements that have been made. We will watch them, monitor them and be in communication with you to the extent they are not honestly kept. Thank you very much.

Mr. William Wachenfeld, please, of the Universal Oil Products, please come forward.

Thank you for being with us today. I appreciate your offer to come and testify, to talk about Universal Oil Products and its difficulties in its East Rutherford location. If you would like to submit something for the record we would be pleased to enter it in its entirety and any additional comments you care to make, please feel free.

Mr. CAVANAUGH. It is a pleasure to be here, Congressman. I must state this panel came as a bit of surprise to us last week. Apparently through inadvertence we weren't notified of this committee hearing today. And when one of your staff members contacted us, I believe late Thursday, to try to find out why we hadn't responded, I think it came to light this is the first time we were made aware of this. In any event, we were the attorneys who have been representing UOP. And unfortunately, as a result of our late notice we were unable to produce someone of a more technical nature.

I do not pretend to suggest that I understand all that has gone on and all that happens with respect to this testing in these sites——

Mr. TORRICELLI. I don't think that is any particular loss. I think what would be helpful to know is that we received testimony today on the likely chain of events for the balance of this year on work on the site to determine the extent of contamination, a concept of how we proceed.

I would be interested in knowing your version of those dates and strategies for the balance of the year as well.

Mr. CAVANAUGH. To the extent that I can help, I'll try. It's coincidental that you heard the department representatives of DEP this morning or this afternoon talk about a meeting. It's coincidental that the meeting is tomorrow morning. In fact, this afternoon we are meeting with representatives of our client coming in from Chicago and elsewhere to go over that which will occur I assume tomorrow at the meeting that we expect to last some time.

Over the course of the last couple of years we have hired the firm of Gary Miller, a very well-known firm, consulting groundwater geologists, and they have submitted and supplied several reports as per our administrative consent order that we agreed to long ago.

Unfortunately, perhaps I think from your comments today and some of the other comments that I have heard, things may not be moving along as quickly as you might like. I can only advise you that there are serious problems just determining what the problem is, and I think as I heard, I believe Mr. Potter and some others have suggested, that UOP has been very cooperative and we have tried to do everything on a timely basis.

I don't think anyone can criticize us of not doing things when we said we were going to. Unfortunately, the last report that was submitted concerning remedial action alternatives, which was submitted around July 1985, has really not been responded to by the Department head.

I'm sure that's what we are going to discuss this morning. So I'm not in a position to advise you as to exactly which of the remedial alternatives they may be looking for. After that is decided, I assume there will be a further feasibility study as to these various remedial alternatives.

I am sure they will have some suggestions, perhaps some criticisms, I don't know, of the various ones that have been offered, and I have a copy if you would like a copy.

Mr. TORRICELLI. We would appreciate it.

Mr. CAVANAUGH. I would be more than happy to leave them for you.

I think, unfortunately, until we meet tomorrow I'm at a loss, and I don't mean to evade your question, but I'm at a loss to tell you exactly which of these alternatives may be selected, and I think my lack of the technical side of it, I don't know how long the various alternatives would take, so——

Mr. TORRICELLI. I think, Mr. Cavanaugh, this is to be of some use to each of us. I have already gained by learning the department's view how we see the time schedule for the balance of this year. They stated they thought they could come to some agreement by summer, in a strategy of looking at these alternatives. I tried to have them commit. If the process then goes into 1987 and cooperation is failing, the Government would be under some pressure to act unilaterally in their powers under law. I think that's important for you to understand, that to the public we can ask patience and seek cooperation just so long—and I think 1986 is the year. After that——

Mr. **Cavanaugh**. We made notes of the comments that were made today, Congressman, I assure you.

Mr. **Torricelli**. There is no use repeating them. I would like to see the document you have presented.

Mr. **Cavanaugh**. I have no problem with that.

Mr. **Torricelli**. I hope monitoring today every one from Mr. Potter to the Department officials perspectives on this issue were helpful to you and your company to know where we are on this long process.

Mr. **Cavanaugh**. Quite frankly, it was very helpful. As I said, it was somewhat of a disconvenience, I guess we were able to be here and have this meeting tomorrow. I think it was helpful and I hope and trust we will be able to continue to cooperate and getting something done as we agreed to sometime ago.

Mr. **Torricelli**. Thank you. When I noted the value of the real estate not currently being used in Bergen County to provide jobs, tax revenue and new opportunities, I can't think of anything that is a better example than your property.

But for this problem, thousands of people would be working on that location, providing jobs and products. It would be good for our county and our country. So there is the immediate fears that I have been the traveling of that material to other communities and the contamination it represents, but also the real cost to the communities in economic terms as well. Thank you very much for being with us today.

This subcommittee meeting is adjourned.

[Whereupon, at 2:15 p.m., the subcommittee was adjourned subject to the call of the Chair.]

APPENDIX

Borough of Lodi

One Memorial Drive
Lodi, New Jersey 07644
(201) 777-9100

VINCENT C. PALADINO
COUNCIL PRESIDENT

365-4095

January 17, 1986

Hon. James H. Scheuer, Chairman
Subcommittee on Natural Resources,
Agriculture Research and
Environment U.S. House of Representatives
Suite 2321 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Scheuer:

In compliance with your request on behalf of the Subcommittee on Natural Resources, Agriculture Research and Environment, I submit the following information:

WATER WELL CONTAMINATION - due to poor conditions and low production of our wells, and the fact that they individually feed water into our system at different points, it would not be financially feasable to install any type of treatment system to individual wells. Therefore, we have decided to discontinue use of these wells, and purchase additional water from our present source, which is the Passaic Valley Water Commission.

If contamination should occur in our three remaining wells, which are also plagued with low production, we will purchase all our water from Passaic Valley.

THORIUM - In regards to the Thorium Contamination, the Borough of Lodi, through the U.S. Department of Environmental Protection, has had soil test samples taken by Oak Ridge National Laboratories of all alleged contaminated areas to verify contamination, and the degree of contamination.

When this determination is made, Becktel National, Inc. is notified to remove the contaminated soil, which is then carted to the Borough of Maywood for stockpiling.

Any future incidents of contamination will be handled in the same manner until we are notified of any changes by the Department of Environmental Protection.

Please feel free to contact me for any further information.

Sincerely,

Vincent C. Paladino
Council President

VCP/mv

INITIAL SCREENING
REMEDIAL ACTION ALTERNATIVES
UOP SITE
EAST RUTHERFORD, NEW JERSEY

July 1985

Geraghty & Miller, Inc.
Ground-Water Consultants
6800 Jericho Turnpike
Syosset, New York 11791

CONTENTS

Page

INTRODUCTION. 1

SUMMARY OF ENVIRONMENTAL CONDITIONS TO BE ADDRESSED 2

REMEDIAL ACTION ALTERNATIVES CONSIDERED 3

INITIAL EVALUATION OF REMEDIAL ALTERNATIVES 6

CONCLUSIONS 12

INITIAL SCREENING
REMEDIAL ACTION ALTERNATIVES
UOP SITE
EAST RUTHERFORD, NEW JERSEY

INTRODUCTION

As specified in the September 7, 1984 Addendum to the July 27, 1982 Administrative Consent Order (AACO) between UOP and the New Jersey Department of Environmental Protection (NJDEP), an initial screening of remedial action alternatives for UOP's East Rutherford site was performed. The information developed during the Phase I and Phase II investigations form the technical basis for the evaluation of alternatives.

The criteria used during the course of the initial screening include:

1. Environmental and public health impacts.
2. Hydrogeologic and engineering feasibility, effectiveness, and reliability.
3. Costs, both for installation and for operations and maintenance.

In the next section of this report, the remedial action alternatives that were considered are listed and described briefly. This list is comprehensive and, therefore, the alternatives vary widely in their merits for use in different parts of the UOP site. This report also contains an initial evaluation of the listed options and provides reasons for selecting certain alternatives for the more detailed evaluation that is to follow after the NJDEP review of this report.

SUMMARY OF ENVIRONMENTAL CONDITIONS TO BE ADDRESSED

A review of the available information, summarized in the Phase I and Phase II reports, demonstrates that the site's remedial action plan(s) should focus on four areas. There does not currently appear to be any measurable public health impacts in the areas requiring remedial action.

Area 1: located along the northern property boundary, in the vicinity of Wells 6I, 17I and, to a lesser degree, extending to the areas of Wells 19I, 21I, 22I, and 24I. This area has ground water that contains dissolved volatile organic compounds (VOCs) in concentrations above 1 milligram per liter (mg/L).

Area 2: located along the western side of the property, approximately 250 feet east of Route 17. This area is also characterized predominantly by dissolved VOCs in the ground water. Well 13I has the highest concentration (total over 200 mg/L); other wells in the area with concentrations above 1 mg/L of VOCs are Wells 12I, 14I, and 16I.

Area 3: Wastewater Lagoons 1 and 2, which have sludges principally containing VOCs and base/neutral organic compounds.

Area 4: Sediments in the drainage channels and Ackerman's Creek. Some base/neutral organic compounds were detected, as well as polychlorinated biphenyls (PCBs).

REMEDIAL ACTION ALTERNATIVES CONSIDERED

The remedial action alternatives fall broadly into three classes as shown below.

Continual Ground-Water Monitoring

1. Monitor Ground Water. Improving or deteriorating conditions on the site could be determined. Specified action levels could serve as decision points for alternative remedial work.

In-Place Source Control

2. Single Layer Clay Cap. Areas associated with high levels of contamination would be graded in order to maximize runoff and minimize infiltration, thereby leaching less contamination from soils above the water table.

3. Multi-Layer Cap (clay and/or synthetic). Such a RCRA-type cap is characterized by very low permeability and hence, very low rates of infiltration.

4. Paving and Construction of Buildings. If either is done over contaminated areas, infiltration will be minimized and hence, less contamination present in soils above the water table will move into the ground-water system.

5. Ground-Water Pumping. The recovery of contaminated ground water can be accomplished by means of one or more wells or trench systems. As

for all ground-water recovery systems, three general treatment options are possible:

a) Treat onsite (air stripping, carbon adsorption, or both) and discharge to surface water.

b) Pretreat onsite and discharge to local POTW for additional treatment.

c) Discharge directly to POTW for all treatment.

6. Slurry Cutoff Wall and Multi-Layer Cap. For selected areas where contamination isolation is suitable, the wall, keyed to a low-permeability formation, and the cap provide complete encapsulation. A small amount of pumping may be required to control the water level in the isolated area.

7. Slurry Cutoff Wall, Multi-Layer Cap, and Active Ground-Water Recovery. This option is the same as No. 7 except that ground-water recovery (not just water-level control) is the object of the pumping.

8. In-Situ Vitrification. Contaminated soil is fused by heat generated as electricity is applied directly to the soil by electrodes.

Source Removal

9. Excavate or Dredge, Treat or Stabilize, and Replace Soil. Treatment could include contaminant reduction by onsite incineration, or contaminant immobilization or degradation by chemical or biological reactions (onsite treatment).

10. Excavate or Dredge, Transport to Approved Facility. Depending on the quality of the soil, the following options are available:

a) Incineration, especially in cases where organics concentrations are high and water content is low.

b) Landfilling, for soils where incineration is not cost effective. Such a facility can be onsite or offsite.

INITIAL EVALUATION OF REMEDIAL ALTERNATIVES

Option 1: Monitor Ground Water

If contamination were present at uniformly low or moderate levels across the 75-acre site, ground water or soil removal/treatment would probably not be feasible. In such a case, ground-water monitoring alone might be the only viable option. As such, it would provide an indication of whether contamination was migrating offsite and whether conditions were changing (presumably improving) through time.

However, selected areas described previously have elevated concentrations of constituents compared to the rest of the property. More substantive remedial actions can be applied to these areas. As a means of evaluating such actions, ground-water monitoring can be performed. Ground-water monitoring alone is not a viable option for the UOP site.

Option 2: Single-Layer Clay Cap

Low permeability clay caps are most effective in cases where identifiable sources of contamination (for example, sludge or soils with high constituent concentrations) are present in the ground above the water table. At the UOP site, ground water is within approximately 1 to 4 feet of land surface. It appears that the bulk of the contamination (either in soil or water) is below the water table and reducing infiltration would not be an effective means of mitigation. The only small benefit that could result is a reduction of leachate generation from the thin band of soil present in the vadose zone above the water table. However, such a marginal benefit is not likely to be cost effective.

Option 3: Multi-Layer Cap (Clay and/or Synthetic)

The permeability of multi-layer caps is even lower than that for a single-layer clay cap. However, for the reasons stated under Option 3, the beneficial effect of capping some areas on the site is likely to be small, as is the case for single-layer caps. In addition, the chances of this option being cost-effective are remote; multi-layer caps are more expensive than single-layer caps.

Option 4: Paving and Construction of Buildings

To the extent that vadose-zone soils have leachable contamination, the reduction in recharge caused by paving or building could prove beneficial. As described under Options 2 and 3, the degree of benefit is likely to be small. However, this option is cost-effective if future use of the site includes buildings and paving. If there are several comparable options for locating new facilities and parking areas, the final choice may be made with the object of covering areas were reduced infiltration may provide some environmental benefit.

Option 5: Ground-Water Pumping

The water table is approximately 1 to 4 feet below land surface. As such, it appears that much of the contamination is in the ground water or in soils below the water table. Pending the results of further aquifer testing, it is probable that substantial remediation can be accomplished by pumping ground water. In the relatively low permeability materials that underlay this site, enhanced recovery can occur by use of ground water intercepting trenches. The most promising locations for this remedial action are Areas 1 and 2.

The water discharged from a ground-water recovery system can be handled in several ways.

a) The water can be treated onsite (by air stripping, carbon adsorption, or both) and discharged to surface water.

b) Pretreat onsite and discharge to the local POTW for final treatment.

c) Discharge directly to the POTW for all treatment.

Depending on the arrangements made, complete treatment by the POTW is likely to be the most cost-effective. Technologically, onsite treatment is feasible, but continued operations are more difficult because of vandalism and the possibility of a series of property owners who may maintain the system with varying degrees of diligence.

Option 6: Slurry Cutoff Wall and Multi-Layer Cap

A slurry wall together with a multi-layer cap can provide effective entombment for areas with soil or ground-water contamination. This method is most advantageous when highly concentrated sources are present and the natural permeability of the aquifer is relatively high. Because a cap of this type has a low but measurable permeability, a small amount of ground water pumping may be required to control fluid level inside the walled area.

The prognosis for Option 6 at this site is poor. Even in the most highly contaminated areas, the concentration of constituents is not extremely high as would be expected, for example, if there were a substantial presence of free product. Furthermore, in some parts of the site where remedial actions are contemplated (for example, Area 1), soil permeabilities are, on average, quite low. The contrast in permeability between a slurry wall and the natural material in such areas would be relatively small thereby negating most of the slurry walls benefits. Therefore, the application of slurry wall and cap at Area 1 would provide little additional benefit as compared to a cap alone. In that case, the slurry wall and cap is not likely to be cost-effective.

Option 7: Slurry Cutoff Wall, Multi-Layer Cap, and Active Ground-Water Recovery

Whereas a small amount of pumping may be required under Option 6 to control the water level within the walled area, the pumping under this option is a substantive part of the remedial action.

As with Option 5 (ground-water pumping), the discharged water would be treated onsite and/or at a POTW. The difference between Options 5 and 7 is that the wall is designed to cut down on the volume of water that is pumped. However, because less relatively clean water from outlying areas is coming into the well/trench system, the concentration of constituents is likely to be higher. For the reasons discussed under Option 6, the prognosis for Option 7 is also poor.

Option 8: In-Situ Vitrification

In-situ vitrification involves fusing soil by passing electric current through it, thereby rendering constituents in the soil immobile. This technology has been demonstrated by the Pacific Northwest Laboratory for sequestering of low- and high-level nuclear wastes. Although there is concern due to the high water content of the soils (especially for Area 3 which contains sludges) and the relatively high cost of electricity in the northeast, vitrification remains a possible option.

Option 9: Excavate or Dredge, Treat, or Stabilize and Replace Soil

A large fraction of the organic constituents at the site are nonhalogenated VOCs, which indicate that biological degradation is a possible means of treatment. It is also possible that selected soils with high organics content could be incinerated onsite.

Areas 1 and 2 are characterized substantially by contamination below the water table, and would not be amenable to large-scale excavating. The wastewater lagoons (Area 3) have sludges that may be more amenable to excavation. The viability of onsite treatment or stabilization will be evaluated in the detailed feasibility study. However, if onsite incineration is considered, the costs could be very high, depending on the amount of material, in relation to the costs of offsite disposal (Option 10). Treated materials or incinerator residues could be returned to the site.

The sediments in the channels and Ackerman's Creek have PCBs at selected locations. PCBs are very difficult to degrade or incinerate. Therefore, PCB-contaminated materials would almost certainly have to be handled offsite.

Option 10: Excavate or Dredge, Transport to Approved Facility

As indicated under Option 9, excavation of sludge from the wastewater lagoons (Area 3) may be an environmentally sound, feasible, and cost-effective remedy. The materials, especially in Lagoon 1, have high levels of organics contamination. The Area 3 sludge along with sediments from the channels containing PCBs can be landfilled at an approved hazardous waste facility. Alternatively, an approved facility could, in theory, be built onsite. However, the shallowness of ground water may make such a facility difficult to construct in conformance with applicable regulations.

Offsite incineration may be possible, as indicated previously, depending on the quality of the soil or dredged materials. Samples of such materials would be submitted for analysis by appropriate receiving facilities so that the cost comparison between landfilling and incineration can be made.

CONCLUSIONS

Of the 11 options described in this report, five are considered to be sufficiently viable so that more detailed feasibility studies are justified. These options are:

Option 4: Paving and Construction of Buildings
Option 5: Ground-Water Pumping
Option 8: In-Situ Vitrification
Option 9: Excavate or Dredge, Treat, or Stabilize and Replace Soil
Option 10: Excavate or Dredge, Transport to Approved Facility

These feasibility studies will be performed in response to the NJDEP's review and approval of this initial screening report.

Respectfully submitted,

GERAGHTY & MILLER, INC.

Robert A. Saar
Robert A. Saar, Ph.D.
Senior Scientist

Michael F. Wolfert
Michael F. Wolfert
Associate

July 25, 1985

January 27, 1986

MORTON THIOKOL, INC.

STATEMENT TO THE SUBCOMMITTEE ON
NATURAL RESOURCES, AGRICULTURE RESEARCH
AND ENVIRONMENT, OF THE COMMITTEE
ON SCIENCE AND TECHNOLOGY, UNITED
STATES HOUSE OF REPRESENTATIVES

Date and Place of Hearing: January 27, 1986, Bergen County Board of Freeholders Chambers, Court Street, Hackensack, New Jersey.

Purpose of Hearing: To review progress, problems, and prospects associated with cleaning up seven designated hazardous waste sites in New Jersey.

Morton Thiokol, Inc. is pleased to offer this statement outlining its ongoing participation in cleanup proceedings at an area identified by the Subcommittee as "(5) Berrys' Creek/Woodridge Mercury deposit and East Rutherford/Velsicol, Inc. sites."

Morton Thiokol is a publicly-owned marketer and manufacturer of high technology propulsion systems, specialty chemicals, and salt. The company is headquartered in Chicago, and employs approximately 17,900 persons throughout its worldwide operations.

The mercury plant at the Berrys' Creek site was operated by a predecessor company until its closure in 1974. Morton Thiokol is participating in the clean up process as the result of a corporate acquisition completed in 1982.

Environmental problems at the Berrys' Creek site have been the subject of litigation brought in 1976 by the State of New Jersey against Velsicol Chemical Corporation and Ventron Corporation (the latter being a Morton Thiokol predecessor company). This statement will not review the history or status of the litigation, whose proceedings are a matter of public record. It should be noted, however, that the litigation is ongoing and that present environmental efforts at Berrys' Creek are being conducted under the control of the trial court pursuant to a consent order negotiated by the State, Velsicol and Morton Thiokol and entered by the court in November, 1984.

Under the consent order, a Site Action Committee was formed to study ecological and environmental problems associated with the Berrys' Creek site. This Committee is comprised of three representatives of the State (which chairs the Committee) and one representative each from Velsicol and Morton Thiokol. Under the consent order, Velsicol and Morton Thiokol have agreed to contribute a total of approximately $1.5 million to the Committee to defray the costs of the site study.

The Committee initially contracted for the performance of a literature review, which has been completed, and has more recently contracted with the U.S. Army Corps of Engineers, Waterways Experimental Station, in Vicksburg, Mississippi to perform a major research study of the many factors that could affect environmental characteristics of the site and its surroundings. Because of its complexity, this particular part of the overall study effort of the Committee could well take in excess of two years to complete.

It is the ultimate purpose of the consent order and of the Committee to produce a final study which presents remedial alternatives for consideration by the parties, by the court, and by other involved agencies.

Investigations to date indicate that ecological factors at Berrys' Creek are unusual and complex. A number of circumstances beyond the control of Velsicol and Morton Thiokol could in the future affect the environment at the site and remedial measures ultimately deemed appropriate. For example, if the Berrys' Creek area were used for flood control purposes, the present brackish water could change to fresh, possibly drastically altering existing characteristics of the mercury (which is believed to pose no present threat). In addition, commercial and industrial development in the area could introduce new factors into the ecosystem that would affect the future behavior of mercury existing at or near the site.

Morton Thiokol intends to continue to work with the State and Velsicol through the Committee to understand the various factors at Berrys' Creek and to produce a reasonable and practical resolution of problems that may exist at the site. Because of the unknowns and complexities of this project, substantially greater time than ordinarily necessary to study other types of disposal sites will be required. It is estimated that a final remedy for this site will not be selected until well into 1988 or 1989.

In the interim, the Committee has undertaken routine monitoring activity designed to confirm that mercury from the site is not posing a threat to man or the environment. All testing to date indicates that mercury deposits, while in the vicinity of the Berrys' Creek site for probably in excess of fifty years, have not mobilized in such a way as to pose a threat to man or the environment, and are not expected to do so during the time the study is being conducted.

VELSICOL CHEMICAL CORPORATION

WORLD HEADQUARTERS
341 EAST OHIO STREET
CHICAGO, ILLINOIS 60611-3371
(312) 670-4500

JOHN W. RADEMACHER
VICE PRESIDENT - ENVIRONMENTAL,
HEALTH AND REGULATORY AFFAIRS

January 24, 1986

The Honorable James Scheuer,
Chairman,
Subcomittee on Natural Resources,
Agriculture Research & Environment
U.S. House of Representatives
Committee on Science and Technology
Suite 2321 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

In response to the January 10, 1986 letter from your Committee on Science & Health, we at Velsicol are pleased to provide our perspective on the Berry's Creek/Woodridge site.

Velsicol shares the concerns of you and your constituents for the environment and natural resources of the state of New Jersey. We view the environmental situation as complex, comprised of many environmental, social, economic and political factors. Heavy industrialization and previous land use practices in the area have added to the concern for the

Berry's Creek ecosystem.

While it is recognized that there has been environmental and ecological degradation in this area, we share the view of State and contract consultants that this particular site presents no immediate danger to public health. The mercury pollution of Berry's Creek has existed for many years. And to date, all studies of the polluted area indicate that damage to the ecosystem has not been catastrophic nor have there been detrimental human health effects as a result of the contamination.

Our involvement at Berry's Creek over the past few years leads us to conclude, as other's in industry and government have, that the complex issues involved will require careful evaluation in order to expedite effective remediation.

Velsicol is working to define the problem and develop acceptable solutions. We have joined other involved parties through our participation on the Berry's Creek/ Woodridge Site Action Committee (SAC), which was formed by an executive order by Commissioner Hughey in October, 1984.

Members of this committee include three representatives of the New Jersey Department of Environmental Protection, one from Morton Thiokol and another from Velsicol. The purpose of the committee is to manage and oversee all cleanup activities.

The Technical Advisory Group (TAG), which was established to provide technical guidance and direction as required by the Site Action Committee. Members on the TAG include representatives of U.S. EPA, the Army Corps of Engineers, Hackensack Development Committee, DEP, Morton Thiokol, as well as Velsicol.

The investments to be undertaken by SAC at this site are projected to be in excess of $1.2 million. To date, Velsicol and Morton Thiokol have spent a total of $375,000 to accomplish the first steps established by the SAC. Of this amount, only $145,000 was actually charged against the project budget.

To date, we have accomplished the following at the site:

- Secured the site to prevent possibility of direct human contact.
- Established a monitoring program to assure that the system is stable and routinely checked. HMDC is conducting this program under the direction of SAC.

- Completed a comprehensive literature search and background investigation (TASK 1), to assure that all known information on the site is reviewed and prior investigation of similar problems involving mercury (including other mercury sites) have been considered prior to the remedial investigation.
- Reviewed future land use options. This is part of the RI/FS process that will evaluate the remedial alternatives and identify the most cost effective and environmentally sound action to be taken at the site. (It should be noted that the New Jersey DEP has reviewed and approved all tasks in the RI/FS to ensure compliance with the National Contingency Plan, State Superfund Objectives and the requirements of the Army Corps of Engineer's Environmental Impact Statement.
- Finally, we have developed a matrix system of possible changes in the environmental conditions due to implementation of various remedial measures. A research program has been designed to determine environmental consequences of these changes and the New Jersey DEP is drawing up a contract to conduct this research program.

During this cleanup process, Velsicol continues to support an effective and ongoing community relations program to ensure that local citizens are advised of actions and information regarding the site and that they have proper access to information and can contribute input at various decision points.

Velsicol has been and will continue to participate fully in helping find solutions to existing problems. We fully support the concept of industry and government working together to solve the environmental problems. We appreciate the opportunity to provide this information to the committee and we want to assure you that we stand ready to provide additional details as they become available.

Thank you.

Sincerely yours,

John M Rademacher

John M. Rademacher